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2100

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                                                                      360
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                                                                      420
cagtictata acccaatgac aacctgtcic titiggittac tgtcctgtga aatgtcagct
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caagtttccc agaagtcgtg tgtttatgat gagtcagagt gcttttcctc ggtgggacag
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ctcctgcttt tattggctct tgtcgaaatc aaattggaag atcttcagtc ccagctgcac
                                                                      180
ccaacgtgga aaagtattcc aggtccatcc ccaaggaacc aacaccgatg acatggactc
                                                                      240
aggaatetta taacetaegt ggactettte cateegtaca ttgtegtgea catgeeacte
atcacctggc gtgcccagat cctcgcargg caacaccctg tgataattcc aggtgattct
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<220>
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  agaagtactt acctcttgaa gatttaatat ataatggttg acatgataca tgtacatgat
                                                                         120
  gaatgaccag atgcttatgg tctacatttt cctttatcct gttagtatta ccttccttaa
. tettigitea tiaacaiget aatteetett eagigittai titetagiga eagaaigeta
                                                                         240
  acatttctta caccctggca gaagggagag aaatgtgttt tggggtgggt aactaaattt
                                                                         300
  ttgagtgaaa tatcataaga tganaatgga aanaaggaga cacaaanagt tatnacaaaa
                                                                         360
  aaacaatggt ttttttagcc atttgactgg ctctttaaat agtctacaag acattcacgt
                                                                         420
  ttaacatcac ttttagtgaa ataaaatgtg ccatactagt atgtgcttca aaagggcaaa
                                                                         480
  tgtgctttag tgccctaagg ctaaattttg gtcatttgac atcagagatg ttgtaagtat
                                                                         540
  tgcacttaat acgcacctat ttntcaatag tgttattttt tggntagcat tttttttacc
                                                                         600
  actaintigt tgatagettt tigtteinin aggitgnaan atgacagige tnainteaaa
                                                                         660
  cagattaccc atntgcagaa ctaagggaag cnatttatgt atgaáagnaa ttnttgaatt
                                                                         720
  ngtcattntc aaccnttgna ttaaagctta gactaaatag taatatatng tgggnaggat
                                                                         780
  tttggttttg tgatatttnt gtgnattaag gnatagatgt taaccnttat tttgtagnaa
                                                                         840
  agtganttgt atgtggttaa ttataaataa aactggtacc aggnaaaaaa aaaaaaaaan
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  naaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa
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ttggatcttg ggagttttct ttgtttgctc ctgtgtttgc ccagctttaa taaaaccagg
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cgcaaacaaa aaccatagca ttctgaacaa tagggggccc acattggacc cagtatgtca
                                                                        240
ctttaatgga cttcaagaaa aaatctgaat gggaaaaatg acactaggaa tgtatactcc
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acacatttta tgccatataa tggtgtgttt tcttaatttt gtttcttgtg gcgaaatgtg
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gctttcaaat taaaatgacc ttttcttctt tgaaactttt tgttttgact tgtataatta
                                                                        420
agggtttgga aagattcata attctgagag aggtttgcaa ccaggagata caaagaagtc
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tcagtagtaa tcttgttcat gtgcttttac agccagctac atttaaggat gtattagtta
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cagaaattat atgtctgtgt atgtgtctct actcaataaa gtacatgcct ccacaaaaaa
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aaaa
                                                                        604
<210> 37
<211> 349
<212> DNA
<213> Homo sapiens
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<222> (328)
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ggcacataga gcatttgggg gactgcgagt gctcaccttt gacttcctgc aggtcggggg
                                                                        180
aaaaccagat catgatgacc aaagtytaca tattettgat etteatggtg etgateetge
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cctccctggg tctcaccagg tatatgccac cacyttctgy tctaaattca gaataagagt
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cacatcagga gagcactgtc cccagganaa tgcaaacggg ttggcagca
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<210> 38
<211> 672
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (353)
<223> n equals a,t,g, or c
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teggtacegg tgettgttgg tttggtgatt gtwategttg ctacagaget gatggtgcca
                                                                        120
ggaacggcag cagcggtcac aggcaagtaa atagtaatgc cggagcaagt ttcctccggc
                                                                        180
tttatcatgt cacccactgt ggtatatgcg ttgtggtctg ccaactttgc cgtgaacaat
                                                                        240
ttcagcaata atcagatggc ggctggcgca atattcaaga taacgcctgg cagtggtgcq
                                                                        300
gctgatggtt cagtgcctgc gscaccgttt ytgccgtatg ttgcacacca ggntctttaa
                                                                        360
acagttttcg saccgcgttt agcgtcaagg gttcaatgcc ggtcggtagc tcgtccttag
                                                                        420
gttcaccgcg agcataagca ttaaacatct catcaatttg cttctggctg gcgctatcaa
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tactttccag catatgttta cgctggcgga aacgggttag cgtttgcccc arcmgwtcat
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aggcaatggg cttaatgaga taatcaaata caccacaacg tacggcttca gacaccgttt
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ccatateget ggetgeagtg gtaaacacca egtegeeggg ataatgegee tgeaccagtt
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catgcagtaa at
                                                                         672
 <210> 39
 <211> 1908
 <212> DNA
 <213> Homo sapiens
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 <222> (63)
 <223> n equals a,t,g, or c
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<221> SITE
 <222> (1893)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1908)
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                                                                         120
caggitataaa aacatigcii tigitgaati giataggigi aaaaagggaa taacigtatg
                                                                         180
caggtttgaa aaggaaatgt gctttaggca tgagtcataa gatgccattg tacttgtagg
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cattttattt tcctttagaa atggacatca gctcttctct tctgactggt aacacatagc
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cccaaagcat gagattattt ttcattgggt ttttattgtt gtttagtttt ggtttgttac
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gccagcccag tctgtctgcg gaacactgac tctgctctct aatgagaaca aagttagaaa
                                                                         420
tctgccgata acctaaaata atttagaaat gaattaaaaa tgtgaaatcg ggttaaagtg
                                                                         480
atgatgataa aatagcatgc aagaaacaag ctccttccat cagacttggc tactgttttc
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gtcaatttta gaacatttcg ttaccccaaa aagaaaccct gtacccttga gcagtcacct
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gggccagata cctaacaggt ttttctccgt gaatcttatg ctgagtagtt tttcctcata
                                                                       1080
accaagcatt tatgatatat tactacttat aatactgtgg ctagtctcta gaatggatgt
                                                                       1140
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                                                                       1200
caaaaatcag gccaaatgac ttggcaaata attgacaaag tggttttcac gtgtgtctat
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cagtcaatta ttgcctaggg tagttcaaaa atatgatgtg agctagttaa gcctttgctt
gactgatttc agtgatattc agaagtgtgt accaatcaag gctctttaaa atacggaacg
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taatgttgtt tgttgtgagc atcaatgcct gtaacaccaa actaaacacg tgtttttggg
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atatgtttcc aatctttaaa tgaccttgcc ctgtccaata aataaatgat tgtctcaccc
                                                                     1860
tgttaaaaaa aaaaaaaatt aaaaaaactg ggnggggggc ccggtacn
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<212> DNA
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ggcataaaga gaaacaaaag acaatgatgg tattctctgt gtcctcagct ttggcacttt
                                                                      180
tgttgatgtt gctaaggagc agtgaccttg ctaaaaagac tgaataatcc acccactgaa
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taqctaacct ggggaggaaa tgaaaatttc ctttgtggat ctccccaaat ccattgttgt
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caccaggece teccagaace tectcagtte etteacagtg caaccetgtg taettggece
                                                                      360
gcaacccaat agtattgtgc ctcacttcac cttccatggg caactgccct cccttctgga
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<212> DNA
<213> Homo sapiens
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ctgtgccggc gtgggcatcc cccggggcag tggaacccgg gcgctcctcc agcttccgag
                                                                      180
tecagecage etgggegegg ggegegeece gagacacecg aggagteegt tecteeetgg
                                                                      240
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                                                                      360
atcogtgete caaactetac acteaaggat geactgegea actetggtgg egatgggetg
                                                                      420
gggcagatgt ccttggagtt ctaccagaag aagaagtctc gctggccatt ctcagacgag
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tgcatcccat gggaagtgtg gacggtcaag gtgcatgtgg tagccctggc cacggagcag
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gagcggcaga tctgccggga gaaggtgggt gagaaactct gcgagaagat catcaacatc
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gtggaggtga tgaatcggca tgagtacttg cccaagatgc ccacacagtc ggaggtggat
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aacgtgtttg acacaggett gegggaegtg cagecetace tgtacaagat eteettecag
                                                                      720
atcactgatg ccctgggcac ctcagtcacc accaccatgc gcaggctcat caaagacacc
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ctgccctctg agcgtcgctg gatctctggg agctccttga tggctcccag accttggctt
ttgggaattg cacttttggg cetttggget etggaacetg etetgggtea ttggtgagae
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cccccttctt tctccactgt acagaagagc caccactggg atggggaata aagttgagaa
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1140
aaaaaaaaa aaa
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<212> DNA
<213> Homo sapiens
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<221> SITE
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tgacgaaggg ccttgtttta ggaatctatt ccaaagaaaa agaagatgat gtgccacagt
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tcacaagtgc aggagagaat tttgataaat tgttagctgg aaagctgaga gagactttga
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acatatotgg accacototg aaggoaggga agactogaac ottttatggt otgoatcagg
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acttccccag cgrggtgcta gttggcctcg gcaaaaaggc agctggaatc gacgaacagg
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aaaactggca tgaaggcaaa gaaaacatca gagctgctgt tgcagcgggg tgcaggcaga
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cggagggagc ggtgcttggt ctctatgaat acgatgacct aaagcaaaaa aagaagatqq
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ttgcttctgg gcagaacttg gcacgccaat tgatggagac gccagccaat gagatgacgc
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caaccagatt tgccgaaatt attgagaaga atctcaaaag tgctagtagt aaaaccgagg
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tocatatoag accoaagtot tggattgagg aacaggcaat gggatcatto otcagtgtgg
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ccaaaggatc tgacgagccc ccagtcttct tggaaattca ctacaaaggc agccccaatg
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tatgctcagc catcgtgtct gctgcaaagc ttaatttgcc cattaatatt ataggtctgg
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cccctctttg tgaaaatatg cccagcggca aggccaacaa gccgggggat gttgttagag
                                                                       1080
ccaaaaacgg gaagaccatc caggttgata acactgatgc tgaggggagg ctcatactgg
                                                                       1140
ctgatgcgct ctgttacgca cacacgttta accegaagnt catcctcaat gccgccacct
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taacaggtgc catggatgta gctttgggat caggtgccac tggggtcttt accaattcat
                                                                       1260
cctggctctg gaacaaactc ttcgaggcca gcattgaaac aggggaccgt gtctggagga
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ttcgtttcag tcaagacaat gcttagttca gatactcaaa aatgtcttca ctctgtctta
aattggacag ttgaacttaa aaggtttttg aataaatgga tgaaaatctt ttaacggaga
caaaggatgg tatttaaaaa tgtagaacac aatgaaattt gtatgccttg atttttttt
catttcacac aaagatttat aaaggtaaag ttaatatctt acttgataag gatttttaag
atactctata aatgattaaa atttttagaa cttcctaatc acttttcaga gtatatgttt
                                                                       1860
ttcattgaga agcaaaattg taactcagat ttgtgatgct aggaacatga qcaaactgaa
                                                                       1920
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                                                                       1980
                                                                       1983
<210> 43
<211> 1406
<212> DNA
<213> Homo sapiens
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<221> SITE
<222> (141)
<223> n equals a,t,q, or c
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<222> (812)
<223> n equals a,t,g, or c
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<222> (1402)
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                                                                        120
ttaaggetta atgeetaage nettggtett aacttgaeet gggataacta etttaaagaa
                                                                        180
ataaaaaatt ccagtcaatt attcctcaac tgaaagttta gtggcagcac ttctattgtc
                                                                        240
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gtgcctgtta atcttcagct acttngggga gggcttgaag ccagggagga actgcctgg
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ggaaagggtg tgtgaacatg gctaacaatc ttcaaatacc caaattgtga tagcataaat
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1740
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1753

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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<211> 1776
<212> DNA
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<211> 443

<212> DNA

<213> Homo sapiens

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720
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<211> 631
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gaggccgtga actccagact ccacagccgg gagctgagcc cagaggccag gaggtccctg
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gagaaggaga aaaacagcct aatgaacaaa gcctccaact acgagaagga actgaagttt
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cttcggcaag agaaccggaa gaacatgctg ctctctgtgg ccatctttat cctcctgacg
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ctcgtctatg cctactggac catgtgagcc tggcacttcc ccacaaccag cacaggcttc
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cacttggccc cttggtcagg atcaagcagg cacttcaagc ctcaatagga ccaaggtgct
                                                                      420
ggggtgttcc cctcccaacc tagtgttcaa gcatggcttc ctggcggccc aggccttgcc
                                                                      480
tecctggeet getgggggt teegggtete cagaaggaca tggtgetggt ceetecetta
                                                                      540
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<223> n equals a,t,g, or c
<220>
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                                                                         120
 ageggtgate atgggggeee egggeteggg caagggeace gtgtegtege geateactae
                                                                         1.80
, acacttogag ctgaagcacc tetecagegg ggacetgete egggacaaca tgetgegggg
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 cacagaaatt ggcgtgttag ccaaggcttt cattgaccaa gggaaactca tcccagatga
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 tgtcatgact cggctggccc ttcatgagct gaaaaatctc acccagtata gctggctgtt
                                                                         360
 ggatggtttt ccaaggacac ttccacaggc agaagcccta gatagagctt atcagatcga
                                                                         420
 cacagigatt aaccigaatg igcccitiga ggicattaaa caacgcciia cigcicgcig
                                                                         480
 gattcatccc gccagtggcc gagtctataa cattgaattc aaccctccca aaactgtggg
                                                                         540
 cattgatgac ctgactgggg agcctctcat tcagcgtgag gatgataaac cagagacggt
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                                                                         660
 aaaaggggtg ctggaaacat tctccggaac agaaaccaac aagatttggc cctatgtata
                                                                         720
 tgctttccta caaactaaag ttccacaaag aagccagaaa gcttcagtta ctccatgagg
                                                                         780
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                                                                         840
 gotgotttto ctaagactto tagtatgtat gaattotttg aaaattatat tacttttatt
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 cgtttgaaat catctagtgt gttgtatgca gttatcctca aaaacatcag cgatgtctga
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 gttcagttaa taagtggttg ataaagtttc catatttttc tggaaaagtt aaaaaaagtt
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 ttttgatcca aatgtgtgat ctgccctgat aaataacaag ttatngtacc atctcccccg
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                                                                        1751
 naataggnag t
 <210> 69
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                                                                         120
 ataatcagat gcagtatcac agctgtgtca gactctagta ccagttgggc aatcaaggca
                                                                         180
 cagotaaaaa ttgaaaacaa agatotggac aacaaaacag ccaaaggtgg gggtcaagaa
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 getetgaegt gtacetaget gtagaatget atgeacaegt geeaggtgta gtgtgeatat
                                                                         300
 ccaggaaaaa ctgcagagag ccccagtctt cacctctggt tgaccatgag ctctgtgtaa
                                                                         360
 gcaggaagtg aaggctaagg cagatttaag ctctgaaagc attccacaac atacacacaa
                                                                         420
 atogtgcaaa gcattaagga aatottgtta otgotaagtg ttgotgacco aggaacaact
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 cctactcagc tggacttaaa aataaaaa
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<211> 245

<212> DNA

<212> DNA

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<223> n equals a,t,g, or c
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<222> (243)
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                                                                      120
tecteacact catgetteet etectagagt gtetggttgg catgateatg tgetacetag
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240
ncncq
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<210> 71
<211> 361
<212> DNA
<213> Homo sapiens
<400> 71
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                                                                      120
gggagaggga gcagctgggc atgtacccta aatgctgtta ccagggaagg actcccagag
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tgaagacaag tagggacttc ctgcagaggt ggtacatgtg ctctctgtat ccatactttt
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tttttttttt ttttgagata gagtttcacc cttgttgccc tggctggagt gcaatggtgc
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gateteaget caetgeaace tetetgeete eegggtteaa gtgattetee tgeeteagee
                                                                      360
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<210> 72
<211> 713
<212> DNA
<213> Homo sapiens
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aacacacata cottatgttt tgttttgttt tgttttacac tcagtataaa tcaggagaag
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ttagocaacc atctagcatt tagaatcotc ttttttattg tottotaagg atatggatgt
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toccataaca gcaacaaaac agcaacaaaa acatttcata aatatcactt gatagactgt
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acacacaca acatatatat tcaacaaata aagcaaaata taacatgcat ttcacatttt
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gtgaagtcat gctttctatt ataataactt ggcttcggtt atccatcaaa tqcacactta
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<211> 862
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<213> Homo sapiens <400> 73

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aggaagcccg	tgcctggcac	ttggaaagat	actgagcatc	ataaccctaa	tgagaaaatg	420
taggctctgt	gaatgttaac	tacaaatcag	gttaggaaag	catatgacac	cctttgtcaa	480
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ggagtcagtc	agagcataaa	tattgcatgt	ttcactttag	aaactgattc	attttagaaa	720
gcagatctgg	attattītgc	agggtagaaa	tgaaggctat	ttctggcatt	cttgctcaaa	780
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<210> 74 <211> 4602 <212> DNA <213> Homo sapiens

<400> 74

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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c
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<220>

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<220>
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gccaaaagat atttgaccgt ttccaaaatt cagattctgc ctctgcggat aaatatttgc
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                                                                        960
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                                                                       1140
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caaacactag atgtaaagag aatgatgaaa acctggaccc tgcagaaagg atttccttta
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<211> 465
<212> DNA
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<223> n equals a,t,g, or c
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 <222> (462)
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<213> Homo sapiens
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<221> SITE
<222> (54)
<223> n equals a,t,g, or c
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<222> (55)
<223> n equals a,t,g, or c
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<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<221> SITE
<222> (1123)
<223> n equals a,t,g, or c
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<221> SITE
<222> (1886)
<223> n equals a,t,g, or c
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<211> 2801

<212> DNA

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tgaggcccga gtgaggcgcg gcggctatag ccgacccgcg gcgccttccc cccqcqtcct
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<400> 99
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<211> 1394

<212> DNA

<213> Homo sapiens

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<222> (901)

<223> n equals a,t,g, or c

<220>

<221> SITE
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<223> n equals a,t,g, or c

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tocacatoto catgggotgt goottoatoa acctotgoat ottggottoa cagoatgott
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totaaaattt attttttaa aaagagaaac tgccccatta ttttggtggg gttggttttt
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<211> 1542
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racattatet ggaetetgga gtgtgaggaa tatggaetee aetetteaet atatteaear
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<213> Homo sapiens
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				aaaacatcat		360
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				ctgtgggttc		540
				ccactcgtgc		600
				tgttggtggc		660 730
				cagatacagg		720 780
				caaggaagat		840
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				agatgtgttg		1260
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				ttttacaggt		1380
				ttaccttcag		1440
				gatcttgata		1500
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<212> DNA

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caaaaaytcc qtcttcaamw mrtgccgaat tcgatatcaa gcttatcgat accgtcgacc
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<212> DNA

<213> Homo sapiens

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<221> SITE
<222> (1405)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (2120)
<223> n equals a,t,g, or c
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teqtqaqttc ttccgcccaa cccagaggaa gcgggagagc agtttacgac agcgccggtc
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gtgtttacgg cggcgccgc tgcgcgcgca tgtttcctct tttcctggtt tctcaagagt
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qctqctqcta acqcggtccc cggcacgcac catctgttgc catcccggcc ggccgaggca
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                                                                      420
aggagategg etaggaaagg ttgcagaetg gacaggagee acataccaag ataagaggta
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ggtcatccgt gtctacagcc tccctgatgg caccttcagc tctgatgaag atgaggagga
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1980
ggagtttgtc cttccaccga gactacgagg gcctttgatg cttagtggaa tgtgtgtcta
                                                                     2040
acttgctctc tgacatttag cagatgaaat aaaatatata tctgtttagt cttaaaaaaa
                                                                     2100
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<213> Homo sapiens

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<211> 900
<212> DNA
<213> Homo sapiens
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ccaaggatgg gcgcttgttc aatgagcaga acttcttcca gcgggccgcc aagcctctgc
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aaqtcaacaa gtggaagaag ctgtactcga ccccactgct ggccatccct acctgcatgg
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aatgtgacag ctgaaaatat ctttgtggat ccagaggacc agagtcaggt gactttggca
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ggctatggct tcgcnttccg ctattgccca agtggcaaac acgtggccta cgtggaaggc
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<210> 162
<211> 1003
<212> DNA
<213> Homo sapiens
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cocagggcca cogottottt ottgatocto titocttaac agtgacttgg gottgagtot
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cccctcacca aggctgggaa cagaggggat gtggtgagag ccaggttcct ctggccctct
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                                                                    420
tecettgeet gtgggeagtg gagaggetge tgggtgtaeg etgeaeetge eeaetgagtt
540
ctaggateca ggactgggte aaagetgeat gaaaceagge eetggeagea aacetgggaa
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1003
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<211> 2196
<212> DNA
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<220> <221> SITE

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<220>
<221> SITE
<222> (1840)
<223> n equals a,t,g, or c
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atgaggcaca aactgaaaac agcctttaaa aatttcattg agaaagtaga ggctctaact
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aaggaggaac tggaatttga agtgcctttt agggacttgg gatttaacgg agctccctat
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aggagtacct gcctccttca gcccactagt agtgcgctgg taaatgctac ggaatggcca
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cettttgtgg tgacattgga tgaggtagag etgatecaet ttragegggt ecagtttcae
                                                                      360
ctgaagaact ttgatatggt aatcgtctac aaggactaca gcaagaaagt gaccatgatc
                                                                      420
aacgccattc ctgtagcctc tcttgacccc atcaaggaat ggttgaattc ctgcgacctg
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aaatacacag aaggagtaca gtccctcaac tggactaaaa tcatgaagac cattgttgat
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gaccetgagg gettettega acaaggtgge tggtetttee tggageetga gggtgagggg
                                                                      600
                                                                      660
agtgatgctg aagaagggga ttcagagtct gaaattgaag atgagacttt taatccttca
gaagatgact atgaagagga agaggaggac agtgatgaag attattcatc agaagcagaa
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gagtcagact attctaagga gtcattgggt agtgaagaag agagtggaaa ggattgggat
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aaccgtggtt ccagacacag ctctgcaccc cccaagaaaa agaggaagta acttctgaac
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ggccatttgt gtggaccaat ctactcgggg aattccaggc ccaccaggac acgtgccaat
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                                                                     1200
ggccccattc agatggcaag ggaggaggtg ttcttgaaga caggaggagg ctcccgctgt
taataaatat tgtttcattc ttctctcttc ctgtcacctt ctgccaagac attgatggct
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ttaattaccc gtatcatggt tottgaccag cacattcaat cotccaacct accotactgo
catgacette egeacatete taagttttat etttgeaata eteaaggtte teggaaattt
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agatatatca ggttgtgcct catgtaccgc ttctagtgaa atgtagagga aggctcaaag
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qaaaaqaqaa gaggaaggga ggccatatct acaacancan cctctcggca ctgctgctcc
                                                                     1860
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                                                                     1920
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caagtatttg gggagtttat cttgccatcc tccccttctg gttctctgca cccacctgtc
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ccactgcagt teetteegtg etetgtgact ttaagagaag aaggggggag gggteeegga
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2160
aaaaaaaaa aaaaaaaaa aaaaaaaa aaaaaa
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<212> DNA
<213> Homo sapiens
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gegggaaage ageteaagee teacceaceg ceetgeeece ageceegeea eteccagget
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cetegggaet eggeggtee teetgggagt eteggaggg aceggetgtg cagaegceat
                                                                      300
ggagttggtg ctggtcttcc tctgcagcct gctggccccc atggtcctgg ccagtgcagc
                                                                      360
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                                                                      420
actggtgttc gctgtggtcc tcttctcggt tgggatcctc cttatcctaa gtcgcaggtg
                                                                      480
caagtgcagt ttcaatcaga agccccgggc cccaggagat gaggaagccc aggtggagaa
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cctcatcacc gccaatgcaa cagagcccca gaaagcagag aactgaagtg cagccatcag
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1920
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cccagtcggt cgcytgccac csctcgtagc cgttacccgc gggccgccac agccgccggc
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                                                                      420
acacagtgtt gctgaaagga aagaagagac gagaagctgt ttgcatcgtc ctttctgatg
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gagtttgtaa aaatgtaaaa tagtatgaac aaaatttgca ctctaccaqa tttqaacatc
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<222> (37)
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gcaacggtcg gtggggcgga gaagggggct ggccccagga ggaggaggaa acccttccga
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gaaaacagca acaagctgag ctgctgtgac agaggggaac aagatggcgg cgccgaaggg
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gagectetgg gtgaggacce aactgggget cocgcegetg etgetgetga ceatggeett
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ggccggaggt tcggggaccg cttcggctga agcatttgac tcggtcttgg gtgatacggc
                                                                       420
gtottgocac cgggcotgto agttgaccta cocottgoac acotaccota aggaaqaaqa
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ggtacccnat tcgccg
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                                                                       120
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attgggacta tccagatctt gtgtggcatg atggtattga gcttggggat cattttggca
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ccattcatag gacccttttt ttttatcatc tctggctctc tatcaatcgc cacagagaaa
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gccctggtgg gtttcattat cctgtctgtc aaacaggcca ccttaaatcc tgcctcactq
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cagtgtgagt tggacaaaaa taatatacca acaagaagtt atgtttctta cttttatcat
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ggtaattctg gcatgtcctc aaaaatgact catgactgtg gatatgaaga actattgact
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tcttaagaaa aaagggagaa atattaatca gaaagttgat tcttatgata atatggaaaa
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gttaaccatt atagaaaagc aaagcttgag tttcctaaat gtaagctttt aaagtaatga
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cagaccctgg atgtgaaatg tgactacacg ctagagaagt ttgccagcag ccagaaagct
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tggcagataa taagggacgg agagatgccc aagaccctgg catgcacaga gaggccttca
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                                                                        780
gccaagggag gagggaggag gtaaaaggca gggagttaat aacatgaatt aaatctgtaa
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aatatggagc atytcaagct teteetgggg gatggggatt gggatgggca gaatetgttt
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tggwtctccg ggttatttcc agtgggtgta aaagcagagc tgggcctttc cctctctat
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tagggaggcc tcattctaag ttcctcaaga gagtccttgg cttaaagctg tagcaagggt
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                                                                          720
  gcctgcaaaa tcagacagaa atggcttgag aagccgcagg ggagcatgcc tgtctctcag
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  tgatagagta tgggagggac ctccctagct tggaaaatga gaattgaagg ggttatgaac
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  aaataggatg cctagttgag gatgttccca aagttttgtc caatcttatc attagtagat
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  tttataagcc acagagacaa accagaaacg gaataatgtt actttggatg ctttattttt
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  atcagaaaga gtaggtgctg agataaggna actttgccaa atgnaagaaa gtcactcact
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  tecaatatee cetetteaag eggetacegt graasggget geaaacacat teeetgagea
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  tecettgetg atacagette titatatita tateetactg gatggtagea tattgetaag
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<213> Homo sapiens
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gatgcaggtg gtcacgtgct tgacgcggga cagctacctg acgcactgct tcctccagca
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ceteatggte gtgetgteet etetggaaeg caegeceteg eeggageetg ttgacaagga
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cttctactcc gagtttggga acaagaccac agggaagatg gagaactacg agctgatcca
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ctctagtcgc gtcaagttta cctaccccag tgaggaggag attggggacc tgacgttcac
                                                                        360
tgtggcccaa aagatggctg agccagagaa ggccccagcc ctcagcatcc tgctgtacgt
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gcaggcette caggtgggca tgccaccece tgggtgetge aggggeeece tgegeeecaa
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gacactectg ctcaccaget ccgagatett ceteetggat gaggactgtg tecactacee
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actgcccgag tttgccaaag agccgccgca gagagacagg taccggctgg acgatggccg
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cogogtocgg gacctggacc gagtgotoat gggotaccag acctacccgc agccctcacc
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ctcgtcttcg atgacgtgca aggtcatgac ctcatgggca gtgtcaccct ggaccacttt
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ggggaggtgc caggtggccc ggctagagcc agccagggcc gtgaagtcca gtggcaggtg
                                                                        780
tttgtcccca gtgctgagag cagagagaag ctcatctcgc tgttggctcg ccagtgggag
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tgtcgtgtcc agcctgacgc ctactggggc agggcagcag gcttttgtgt tctctaaaaa
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tgttttatcc tccctttggt accttaattt gactgtcctc gcagagaatg tgaacatgtg
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tgtgtgttgt gttaattctt tctcatgttg ggagtgagaa tgccgggccc ctcagggctg
                                                                       1080
teggtgtgct gteagectee caeaggtggt acageegtge acaceagtgt egtgtetget
                                                                       1140
gttgtgggac cgttgttaac acgtgacact gtgggtctga ctttctcttc tacacgtcct
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                                                                       1260
ggcatcttgc tgctaatcct gaggctggta gcagaatgca cattggaagc tcccacccca
                                                                       1320
tattgttctt caaagtggag gtctcccctg atccagacaa gtgggagagc ccgtgggggc
                                                                       1380
aggggacctg gagctgccag caccaagcgt gattcctgct gcctgtattc tctattccaa
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                                                                       1500
cctcaaggg
                                                                       1509
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<222> (3121)
<223> n equals a,t,g, or c
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cagaaatctt cacagtgaat gggattctgg gagagtcagt cactttccct gtaaatatcc
                                                                        180
aagaaccacg gcaagttaaa atcattgctt ggacttctaa aacatctgtt gcttatgtaa
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caccaggaga ctcagaaaca gcacccgtag ttactgtgac ccacagaaat tattatgaac
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ggatacatgc cttaggtccg aactacaatc tggtcattag cgatctgagg atggaagacg
                                                                        360
caggagacta caaagcagac ataaatacac aggctgatcc ctacaccacc accaagcgct
                                                                        420
acaacctgca aatctatcgt cggcttggga aaccaaaaat tacacagagt ttaatggcat
                                                                        480
ctgtgaacag cacctgtaat gtcacactga catgctctgt agagaaagaa gaaaagaatg
                                                                        540
tgacatacaa ttggagtccc ctgggagaag agggtaatgt ccttcaaatc ttccagactc
                                                                        600
ctgaggacca agagctgact tacacgtgta cagcccagaa ccctgtcagc aacaattctg
                                                                        660
actocatoto tgocoggoag ototgtgoag acatogoaat gggottoogt actoacoaca
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cogggttgct gagogtgctg gotatgttct ttotgcttgt totcattctg tottcagtgt
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atateatgge tteaaggaac acceagecag cagagtecag aatetatgat gaaateetge
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agtccaaggt gcttccctcc aaggaagagc cagtgaacac agtttattcc gaagtgcagt
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ttgctgataa gatggggaaa gccagcacac aggacagtaa acctcctggg acttcaaqct
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atgaaattgt gatctaggct gctgggctga attctccctc tggaaactga gttacaacca
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ccaatactgg caggttccct ggatccagat cttctctgcc caactcttac tgggagattg
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caaactgcca catctcagcc tgtaagcaaa gcaggaaacc ttctgctggg catagcttgt
                                                                       1200
gcctaaatgg acaaatggat gcataccett cetgaaatga etceettetg aatgaatgae
                                                                       1260
aaagcaggtt acctagtata gttttcccaa acttcttccc atcatagcac atgtagaaaa
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taatattttt atggcacact gggataaaca agcaagattg ctcacttctg gaagctgcat
                                                                       1380
atgactagag gcctcttgtg actggaggta acaaccctgc ccagtaactg tgggagaagg
                                                                       1440
ggatcaatat titigcacacc tgtaataggc catggcacac cagccaagat gctctgctca
                                                                       1500
cagtcagtat gtgtgaagat ccctggtgcg tggccttcac cacgcatctt gagcaaatta
                                                                       1560
ggaaaatgta cccttcgctt gaggcagatg cagcccttcc cccgagtgca tggcttggag
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gcataacagg cttagtaagt ccaaacacag atgacagtgc tgtgtggqtc tctqtcaqaq
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gcagggtcta gagactgctg ggacactttt cttggagtgc tacttcagaa gccttatagg
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attttettte tggecaagat tteettetgt ateaeteeaa geageeteag cagaagaage
                                                                       1920
agccatgccc agtattccca ctctccaaaa ggaactgacc agcttatatt tctcacactt
                                                                       1980
ctggggaact gggtataatc caaccatcaa aatagaagac cttgcaagaa gcagagtcat
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totocagaag gaacttggga gatgatggtg cagatgatga aactgggttc atcocagttc
                                                                       2100
caaagactca gagaactaga gtttaagctg aggcagagtg ccgccaccct ggcatgcccc
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acaaacagat caccagccag cttacacagg cattaactct cctcaatgag gaagaatcat
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tcacaactga gcaagacatt catatgatca tttaaggaag tgtttccctt atgtgttagc
                                                                       2280
aagtataatc ggctaactcc taaatcccaa tgaatagtcc taggctggac agcaatgggc
                                                                       2340
tgcaattagg cagataaaga catcagtccc agtaaatgaa tccatagact catctagcac
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caactaccat tagcactatg ttaggagctg caaggcccca aagtagaaga tgtgcataat
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gtctgctctt gtgtagctca ggagacaatt ccagcacaga cactacagtt aacgctgaac
                                                                       2520
tgcagctgca agtaatagca tgaacagtca gaaaaatacc ttatgagggg gcagggctga
                                                                       2580
agctgggcct tgaaggatgg atgaaatttg gatagagaat gaggaagaca gagggcctcc
                                                                       2640
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aagtgagaga agcatgaaaa atgagcaggg gcctggatca gtggggtgta ttcagagcac
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ccagatgtgt gcccccaccc catgtccatt tacatgtcct tcaatgccca cctcaaaagg
                                                                   2820
tacctcttct gtaaagcttt ccctggtatc aggaatcaaa attaatcagg gatcttttca
                                                                   2880
2940
agcataacta attatttgtt ttcctcacta cattgtacat gtgggaatta cagataaacg
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gaagcckgct ggggtggtgg ctcacgcctg taatcccaac actttgggag gccaaggcag
                                                                   3060
geggateace tgaggteagg arttegagat tartetggee aacatggtga aaccecatnt
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ntactaaaaa tacgaaatta gccaggtgtg gtggcacaca tctgtagtcc cag
                                                                   3173
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<211> 991
<212> DNA
<213> Homo sapiens
<400> 175
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acaaccacgg totcaggaga tgtotgattt ccacagacat gcaccatata gaagagagtt
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tccaagaaat caaaagagcc atccaagcta aggacacctt cccaaatgtc actatcctgt
                                                                    240
ccacattgga gactctgcag atcattaagc ccttagatgt gtgctgcgtg accaagaacc
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tectggegtt ctaegtggae agggtgttea aggateatea ggageeaaac cccaaaatet
                                                                    360
tgagaaaaat cagcagcatt gccaactctt tcctctacat gcagaaaact ctgcggcaat
                                                                    420
gtcaggaaca gaggcagtgt cactgcaggc aggaagccac caatgccacc agagtcatcc
                                                                    480
atgacaacta tgatcagetg gaggtccacg etgetgecat taaatccetg ggagageteg
                                                                    540
acgtctttct agcctggatt aataagaatc atgaagtaat gtcctcagct tgatgacaag
                                                                    600
gaacctgtat agtgatccag ggatgaacac cccctgtgcg gtttactgtg ggagacagcc
                                                                    660
caccttgaag gggaaggaga tggggaaggc cccttgcagc tgaaagtccc actggctggc
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ctcaggctgt cttattccgc ttgaaaatag ccaaaaagtc tactgtggta tttgtaataa
                                                                   780
actitatety etgaaaggge etgeaggeea teetgggagt aaagggetge etteceatet
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900
acacattgta ctgagtggtt tttctgaata aattccatat tttacctaaa aaaaaaaaa
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aaaaactcga gggggggccc gtacccaatt t
                                                                   991
<210> 176
<211> 1290
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (1253)
<223> n equals a,t,q, or c
<220>
<221> SITE
<222> (1257)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1259)
<223> n equals a,t,g, or c
<220>
<221> SITE
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<222> (1266)
<223> n equals a,t,q, or c
<400> 176
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                                                                       120
aacaaggcca tgggtcggcc cctgctgctg cccctrctgc ycctgctgcw gccgccagca
                                                                       180
tttctgcagc ctrgtggctc cacaggatct ggtccaagct acctttatgg ggtcactcaa
                                                                       240
ccaaaacacc totcagooto catgggtggc totgtggaaa toccottoto ottotattac
                                                                       300
ccctgggagt tagccayagy tcccracgtg agaatatcct ggagacgggg ccacttccac
                                                                       360
gggcagtcct tctacagcac aaggccgcct tccattcaca aggattatgt gaaccggctc
                                                                       420
tttctgaact ggacagaggg tcaggagagc ggcttcctca ggatctcaaa cctgcggaag
                                                                       480
gaggaccagt ctgtgtattt ctgccgagtc gagctggaca cccggagatc agggaggcag
                                                                       540
cagttgcagt ccatcaaggg gaccaaactc accatcaccc aggctgtcac aaccaccacc
                                                                       600
acctggaggc ccagcagcac aaccaccata gccggcctca gggtcacaga aagcaaaggg
                                                                       660
cactcagaat catggcacct aagtctggac actgccatca gggttgcatt ggctgtcgct
                                                                       720
gtgctcaaaa ctgtcatttt gggactgctg tgcctcctcc tctgtggtgg aggagaagga
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aaggtagcag ggcgccaagc agtgacttct gaccaacaga gtgtggggag aagggatgtg
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tattagecce ggaggacgtg atgtgagace egettgtgag teetecaeae tegtteecca
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ttggcaagat acatggagag caccctgagg acctttaaaa ggcaaagccg caaggcagaa
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ggaggctggg tccctgaatc accgactgga ggagagttac ctacaagagc cttcatccag
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gagcatccac actgcaatga tataggaatg aggtctgaac tccactgaat taaaccactg
gcatttgggg gctgttyatt atagcagtgc aaagagttcc tttatcctcc ccaaggatgg
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aaaatacaat ttattttgct taccatacac cccttttctc ctcgtccaca ttttccaatc
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tgtatggtgg ctgtcttcta tggcagaagg ttttggggaa taaatagcgt ganatgntnc
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tgactnaaaa aaaaaaaaaa aaaaactcga
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<210> 177
<211> 2290
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (1011)
<223> n equals a,t,g, or c
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ggageteage accettgetg tggaceagtg aaggetgtte cagaceaggt gettecagae
                                                                      120
atttccaggc tccaggagag aggctgggag cccccacaga aagcacagga aaatgcaaaa
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240
agaagggtcc atgattacca gaaacatcaa agagtacttt ctaccatttt tattctgttq
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tgttgaggcc agcattgcaa taaacaagct aaactactta cattggactc attttcagta
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actgacattt acaggaatat actagaaacg gcactaaaaa gtttaagaaa agttacggta
                                                                      420
aacttgcatg cacatcatac agaaaagtaa cattttaaat ataaaaaaga aaaacttcct
                                                                      480
ggaagcatta tgccagtatt aaggaacagt gctactctgg atgtgacaaa ttctgtatgt
                                                                      540
gggtgttact ctttcccaaa agactgtcag aggcgtgagt gctgcaaaag aacaacaaca
                                                                      600
aaaacaaaca cacaaaaaaa tgtgtcttac agtttgtaag caagatgaca ctgcccaaca
                                                                      660
caaagagggg tetggagtte agtteaegee egaageetge eeceteggee teeaggggte
                                                                      720
attragagtg ttctcaaatc caattrogac acacgacttg tractactro trtccccttg
                                                                      780
aaaaaagcat gttagaagct gccctacagg tctcagcagt gggacaatct aattgaatca
                                                                      840
ccgcagcctt ctaatacaga agaaacggac gtgactgtca ccctcagccc gccagcaagg
                                                                      900
gcgctgagga agtcattaat ccttcgaaac tctgaaaaga aaccagtgtt gaagtctgga
                                                                      960
cagaaagcct taaaaaagtg acagcaccaa tgcagctgct cagtgtaccc nccgtgggct
                                                                     1020
gtcagggtca gtggcttctt tctagatgaa aggagcagag gcgagccgac gccaccgtca
                                                                     1080
cagagaacca geegagaagg aaaggeeeca egatgeteee tgtgegetge eeccacagee
                                                                     1140
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ggccgctccc ccgacggctc acacaggcag cacctcactg ccctgtggct ggaggggcat
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tgcaaggagc gcccccagc cccaggcacc cccggcttag ggtgtacgta tcacccagcc
                                                                       1260
ctgtgctggc agcacgttac caaccagcct gcgtgaagac ctgtcaactg tcgtgtgtga
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attoottaaa ttoggtttaa atagtooatt aaagatotgt ttagaaaata ootttgaaaa
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cgagggtaac tttaaaaaat ggaaactttc aaatccattt atatttttat tataaacaaa
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tttaaaaaat gataatttac cagcatctcc tcatcagagt tccctctcca gtaagggtat
                                                                       1560
acctacatet gtaagggtea gtggaetetg aateaatttt atggttgttt taaaateace
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gtgtattagg atactaatga tagtccctat atccatccag aaatgctggc agaaagcact
                                                                       1680
ggccaccata caggacagac cacaccacag etecatacce agegtetgee tggaggetee
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gcgtgagcag ggagcaccgt gcgagtctcc gggagggaat cctcctgggg cccagagact
                                                                       1860
cetecacece tggggaggge agacaggete gggarggeet ggecaggeea etggaggetg
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gcagggagca ggcatgtcca cccgcaagcc tgggaggcta actctggcat tcctggccgg
                                                                       1980
ageogecatg cteattggtg ggccagtttg ggacatecee gtacteaaag accatatgge
                                                                       2040
agcctctggg aaaacaaaac caaaacatca ccttctatta aactctgtat attattattt
                                                                       2100
tttacaatag aaagttaaaa atcaagactt agatttacta tacatttttt ctctcagatt
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acaaaqttta tattatataa ctggggttcc ctaaattgat ttcttttaaa acagtcttaa
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<211> 549
<212> DNA
<213> Homo sapiens
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tgtggaatag tgtctgtcca tgcctctcct catgggctac cacctctgcc accgtggtta
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atccattcta gaatgctcct tcaccaggac cagagaactg atttacagaa gtgacatgaa
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                                                                        540
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aaaaaaaa
<210> 179
<211> 1509
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (517)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1509)
<223> n equals a,t,g, or c
<400> 179
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geoegeegea teegeegeeg cageeceeag catgteggge ceagaegteg agaegeegte
                                                                        120
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<220> <221> SITE

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cgccatccag atctgccgga tcatgcggcc agatgatgcc aacgtggccg gcaatgtcca
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eggggggee atcetgaaga tgategagga ggeaggegee atcateagea eeeggeattg
                                                                      240
caacaqccaq aacggggagc gctgtgtggc cgcctggct cgtgtcgagc gcaccgactt
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cottytctccc atgrgcatcg gtgaggtggc gcatgtcagc gcggagatca cotacacctc
                                                                      360
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ggtcctcgag gtgcctcctg ttgtgtattc ccggcangag caggaggagg agggccggaa
                                                                      540
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ccaqccaqtc ctcaacccag agccgaacac tgtcagctac agccagtcca gcttgatcca
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cctqqtqqqq ccttcagact gcaccctqca cqqctttqtq cacqqaqqtq tqaccatqaa
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geteatggat gaggtegeeg ggategtgge tgeacgeeac tgeaagacea acategteac
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cgaccetgtt gtggacaget etcagaageg etacegggee geeagtgeet tetteaceta
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atteacattg agagetggtg ttgtetgaag ttttegtate acagtgttaa cetgtactet
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1500
                                                                     1509
aqaaaaaan
<210> 180
<211> 1316
<212> DNA
<213> Homo sapiens
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<221> SITE
<222> (221)
<223> n equals a,t,g, or c
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<221> SITE
<222> (574)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1260)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (1301)
<223> n equals a,t,g, or c
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<222> (1313)
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qcqqctccqq ttcccqctgc ggctccagcc tgcatcctca gaccctgcqg cagcagcggc
                                                                    180
tgcaactgcg getcctggcc agaccceggc ctcagcgcaa ntccagcgca gaccccagcg
                                                                    240
cocquietge etggteetge tettecaggg coettecceg geggeegegt ggteaggetg
                                                                    300
cacccaqtca ttttggcctc cattgtggac agctacgaga gacgcaacga gggtgctgcc
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cqaqttatcq qqaccctgtt gggaactgtc gacaaacact cagtggaggt caccaattgc
                                                                    420
ttttcaqtgc cgcacaatga gtcagaagat gaagtggctg ttgacatgga atttgctaag
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aatatgtatg aactgcataa aaaagtttct ccaaatgagc tcatcctggg ctggtacgct
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acgggccatg acatcacaga gcactctgtg ctgnatccat gagtactaca gccgagaggc
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ccccaacccc atccacctca ctgtggacac aagtctccag aacggccgca tgagcatcaa
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agcctacgtc agcactttaa tgggagtccc tgggaggacc atgggagtga tgttcacgcc
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totgacagtg aaatacgcgt actacgacac tgaacgcatc ggagttgacc tgatcatgaa
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gacctgcttt agccccaaca gagtgattgg actctcaagt gacttgcagc aagtaggagg
                                                                    840
qqcatcaqct cqcatccagg atgccctgag tacagtgttg caatatgcag aggatgtact
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gtctggaaag gtgtcagctg acaatactgt gggccgcttc ctgatgagcc tggttaacca
                                                                    960
agtaccqaaa atagttcccg atgactttga gaccatgctc aacagcaaca tcaatgacct
                                                                   1020
tttgatggtg acctacctgg ccaacctcac acagtcacag attgcactca atgaaaaact
                                                                   1080
tgtaaacctg tgaatggacc ccaagcagta cacttgctgg tctaggtatt aaccccagga
                                                                   1140
ctcagaagtg aaggagaaat gggttttttg tggtcttgag tcacactgag atagtcagtt
                                                                   1200
1260
sgrggggggg cccggtccca ttsscccttt ngtaattcgt nttacaatcc ccngqc
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<213> Homo sapiens
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ttatggggct ggggactaga attggatgct tcaaaaccat cacctgttgg ccaacaagtt
                                                                    180
tgacccaaag gtagatgata atgctcttca gtgcttagaa gaatacctac gttataaggg
                                                                    240
ccattctatt qggacctgaa ctttgaagac cacamtattg aagaggcgtt gcttaccygt
                                                                    300
tgggggccaa gaggcatgtt accaaacatg gyycargaam yttggykggg amcarkkkkg
                                                                    360
gkkqqqarrm cmrgggyttg scaawttcsk kggcmwccyt ttagggtaar rrgggckgtw
                                                                    420
attagattgt gggtaaagta ggatcttttg cccttgcaaa tttgctgcct gggtgaatgy
                                                                    480
                                                                    540
tgcttgttcc ttctcmaccc ctaaccctag tagttcctcc actaactttc tcactaagtg
                                                                    600
agaatgagaa ctgctgtgat agggagagtg aaggagggat atgtggtaga gcacttgatt
                                                                    660
tcagttgaat gcctgctggt agcttttcca ttctgtggag ctgccgttcc taataattcc
720
acttaaaaat aaatagctcc tgattcaaag taaaaaaaaa aaaaaaaaa aaaaaaa
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<211> 791
<212> DNA
<213> Homo sapiens
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<221> SITE
<222> (315)
<223> n equals a,t,g, or c
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<221> SITE
<222> (340)
<223> n equals a,t,g, or c
<400> 182
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actggtcttc aaatgtgtac atgtgtgcca gggagcaaat gccttcttgt ttctgaaatt
                                                                       120
ggtcttttag actgttcttt tttcccatct tctcacctcc tgcccctcct tcagggtact
                                                                       180
teegtggeea gaacceetee aggteagagg cagaagagaa geeteatggg teacageage
                                                                       240
aqatqtqqqc tqqaqatcta ttcatttqqt tttqqcttqa attttctqra tqqtttactt
                                                                       300
gatcytggga aaganatatc ttgccaggaa aaatgatagn ccttgacaat gttgaatgat
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cctgcaccac cttgaaagac atttctaata tggtttgtca ggcaaagtgg ttagtagtca
                                                                       420
tttgtggcct gaggtagaag tcctcagaaa tcagcagact tcactgataa aatgctgact
                                                                       480
tgcccctgga ctgggctctg tgagagtggc cttctgcact gtgcacagta ggtgtgaaca
                                                                       540
caccacacct acagggacca cgtggtgggc tgtggactag cggccaagct ccctgcaggc
                                                                       600
ccactaatag aattcagctt ttagcatggg ctgtttcata ctgttctgat gaaactgatt
                                                                       660
tggtttcttt cctccatacc 'ccttctgcat ttcagtgttt ttgtttagtt ttcctggttt
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780
aaaaaaaact c
                                                                       791
<210> 183
<211> 1405
<212> DNA
<213> Homo sapiens
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<221> SITE
<222> (1359)
<223> n equals a,t,g, or c
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agtagcatgg agctggaaga acttcggcat gagaaagaga tgcagaggga ggaaatacag
                                                                       120
aagctgatgg gccagataca tcagctcaga tccgaattac aggatatgga ggcacaqcaa
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gttaatgaag cagaatcagc aagagaacag ttacaggwtc tgcatgacca aatagctggg
                                                                       240
cagaaagcat ccaaacaaga actagagaca gaactggagc gactgaagca ggagttccac
                                                                       300
tatatagaag aagatettta tegaacaaag aacacattge aaageagaat taaagatega
                                                                       360
gacgaagaaa ttcaaaaaact caggaatcag cttaccaata aaactttaag caatagcagt
                                                                       420
cagtotgagt tagaaaatog actocatoag otaacagaga ototoatoca gaaacagaco
                                                                       480
atgotggaga gtotcagcac agaaaagaac tooctggtot ttoaactgga gogoctogaa
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cagcagatga actccgcctc tggaagtagt agtaatgggt cttcgattaa tatgtctgga
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attgacaatg gtgaaggcac tcgtctgcga aatgttcctg ttctttttaa tgacacagaa
                                                                       660
actaatctgg caggaatgta cggaaaagtt cgcaaagctg ctagttcaat tgatcagttt
                                                                       720
agtattegee tgggaatttt teteegaaga taccecatag egegagtttt tgtaattata
                                                                       780
tatatqqctt tqcttcacct ctgggtcatg attqttctqt tqacttacac accaqaaatq
                                                                       840
caccacgacc aaccatatgg caaatgaacc aagcccaqtt qttqcaqtqa ttqqttqtct
                                                                       900
ttttctaqac ttqqqatctq caagaaggcc aattqcctaa aatttctqaq aacaqtqcac
                                                                      960
aagattattt tatcactaca agcttttaac tttttaagtt attgtacaag tattctacct
                                                                     1020
aaatcttcca atttccttta aatggtaaga gtttctaaaa cagacaataa tttaacaagc
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tragetretge tittatetgag tittagtggte etaatatata tgtagagaaa gatggtgggg
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ttgttcacct ctgtacagac catctgtatg ttaggtgaca ttgattatgg gttataatca
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gggaaactaa ttgtatttag tgacaaaaat aaaaagtttt ttttttataa ttcagtctgc
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ttttggattt tcatatattt aactttgcaa aaagatttac tttgtacatg ttacaggett
                                                                     1320
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taaaaaaaaa aaaaaaaaa ctcga
                                                                     1405
```

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<212> DNA
<213> Homo sapiens
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<221> SITE
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<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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caccaccacc atgttggctg caaggctggt gtgtctccgg acactacctt ctagggtttt
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acgatcaata ccatatgacc agagcccagg cccaaagcat cttgcttggt tgctacattc
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ctcgatgctg agtatctaca tggatacatt aaatatattt atgcgagttg caactatgct
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aaatatcttg tttaatgggg cagatatgca ttaaatagtt tgtacaagca gctttcgttg
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 tggaatgact gtataccatc tggattacgt ggctgtatgt taattgaatt agcattgaga
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 ggaaggttac aactagaggc ttgtggaatg agacgtaaaa gtctattaac aagaaaggta
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1200
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                                                                     1212
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gaggaaaaag						420
tctgyctgcc	tcgctggaat	gtgggcccct	gctccccgtc	aggttgtgct	gtctctgacc	480
tatgtttaca						540

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cagettgetg tggggtgetg acatgtgtca ccaetgeece cettgeece gggggggtea
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 tggtctcctc ctggatgctg ctccttgaat yttttttytt gawaaaccyt ttamaattaa
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 aaaaaaaaa aaaaaactcg a
                                                                         681
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 <213> Homo sapiens
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<222> (1005)
<223> n equals a,t,g, or c
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gctggatgat tgctgggcaa aggtggcctt ttagagctct taaaagccca caaaaaggct
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attogtagag ccacagtcaa cacatttggt tatattgcaa aggccattgg cctcatgatg
                                                                         240
tattggctac acttctgaac aacctcaaag ttcaagaaag gcagaacaga gtttgtacca
                                                                         300
ctgtagcaat agctattgtt gcagaaacat gttcaccctt tacagtactc cctgccttaa
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tgaatgaata cagagttcct gaactgaatg ttcaaaatgg agtgttaaaa tcgctttcct
                                                                         420
tcttgtttga atatattggt gaaatgggaa aagactacat ttatgccgta acaccgttac
                                                                         480
ttgaagatgc tttaatggat agagaccttg tacacagaca gacggctagt gcagtggtac
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actatgtatg gcccaatgtr tttgagacat ctcctcatgt aattcaggca gttatgggag
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ccctagaggg cctgagagtt gctattggac catgtagaat gttgcaatat tgtttacagg
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gtctgtttca cccagcccgg aaagtcagag atgtatattg gaaaatttac aactccatct
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acattggttc ccaggacgct ctcatagcac attacccaag aatctaccaa cgatgataag
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racacctata ttcgttatga acttgactat atcttataat tttattgttw atttkgtgkt
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taatgcacas tacttcacac cttaaacttg ctttgatttg gtgatgtaaa cttttaaaca
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ccaqaacctq cttgctggag cttagtgctc agagctgggg agggaggttc cgccgctcct
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  gaageteegg gateeeagea geegeeaege cetggeetea geetgegggg etecagteag
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  gecaacaceg acgegeantg ggaggaagae aggaceettg acateteeat etgeacagag
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  gtcctggctg gaccgagcag cctcctcctc ctaggatgac ctcaccctcc agctctccag
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  acqqqqtcaa tqcctqcatt ctgccactgc tgcagatcga ccgggactct ggcaatcctc
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  ggagaaccca caccagcccg ccagcctgca ggcactgact cccagggcaa cacagtcctg
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  ccctggtgag cctgagccag gannttggcg ccccgaagct cctacaggcc ccaatgccac
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  gccagaggac agagcagagg atctttccaa ccacatctgc tggctctggg gtcccagtga
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  2779
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<210> 192

<211> 1923

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (1900)

<223> n equals a,t,g, or c
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<400> 192

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acateatege getggeegge egeggetggt tgeagtetag egaceaegge cagaegteet
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cgctgtggtg gaaatgctcc caagagggcg gcggcagcgg gtcctacgag gagggctgtc
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                                                                        300
agagecteat ggagtaegeg tggggtagag cageggetge catgetette tgtggettea
teatectggt gatetgttte atecteteet tettegecet etgtggacce cagatgettg
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tetteetgag agtgattgga ggteteettg cettggetge tgtgtteeag ateateteee
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tggtaattta ccccgtgaag tacacccaga ccttcaccct tcatgccaac cstgctgtca
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cttacatcta taactgggcc tacggctttg ggtgggcagc cacgattatc ctgatyggct
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ccaggtactt ctacacatct gcctaacttg ggaatgaatg tgggagaaaa tcgctgctgc
                                                                       660
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aagtagtgtt atagtttcat gtttatcttt tattatgttt tgtgaagttg tgtcttttca
                                                                       840
ctaattacct atactatgcc aatatttcct tatatctatc cataacattt atactacatt
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tqtaaqaqaa tatgcacgtg aaacttaaca ctttataagg taaaaatgag gtttccaaga
                                                                       960
tttaataatc tgatcaagtt cttgttattt ccaaatagaa tggactcggt ctgttaaggg
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ctaaggagaa gaggaagata aggttaaaag ttgttaatga ccaaacattc taaaagaaat
                                                                       1080
qcaaaaaaa agtttatttt caagccttcg aactatttaa ggaaagcaaa atcatttcct
                                                                       1140
aaatgcatat cattigtgag aattictcat taatatcctg aatcattcat ticagctaag
                                                                       1200
gcttcatgtt gactcgatat gtcatctagg aaagtactat ttcatggtcc aaacctgttg
                                                                       1260
ccatagttgg taaggctttc ctttaagtgt gaaatattta gatgaaattt tctcttttaa
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gtttatatgt tcagaaccag agtagactgg attgaaagat ggactgggtc taatttatca
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aagtgccact aaaacagcct caggagaata aatgacttgc ttttctaaat ctcaggttta
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totgggotot atoatataga caggottotg atagtttgca actgtaagca gaaacotaca
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ccacaggaga attcggggat ttgagtttct ctgaatagca tatatatgat gcatcggata
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ggtcattatg attititacc atticgacti acataatgaa aaccaattca tiitaaatat
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cagattatta ttttgtaagt tgtggaaaaa gctaattgta gttttcatta tgaagttttc
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                                                                       1923
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<211> 2346
<212> DNA
<213> Homo sapiens
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<222> (220)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c
<400> 193
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gctgcagggg atcaagtctt ctctggggct gggcacgtan aagagcatgt ggctggtgga
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cccctagtgc cctcggctag catgacccgc ctgatgcgwt sccgcacagc ctctggttcc
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agegteatte tetggatgge accegeagee geteceacae cagegaggge accegaagee
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qctcccacac cagcgagggc acccgcagcc gctcgcacac cagcgagggg gcccacctgg
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ggattcatgt cgaggctaga ggcatttgga acaacaaatc tacgtagtta acttgaagaa
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acaatc
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<210> 194
<211> 3054
<212> DNA
<213> Homo sapiens
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<221> SITE
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<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (2645)
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<221> SITE
<222> (3034)
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<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (3047)
<223> n equals a,t,g, or c
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tggtcatagg ctcactettt cccccaaatc ttcctctgga gctttgcagc caaggtgcta
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3000
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<220>

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<211> 907
<212> DNA
<213> Homo sapiens
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<222> (18)
<223> n equals a,t,g, or c
<220>
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<222> (89)
<223> n equals a,t,g, or c
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coctggcctg ggcctgcacc agcctgcgng cgggctccca cagcagcccc cttccaagca
                                                                     120
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cggaaggett tgtgeteace tacaagetgg gtgageaggg tgeeageage etgttgatee
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kagggcaaga agaagtgggg caaagcctgg cgctcggccg cggtcgcggc agctttgcma
                                                                     180
totggagoca ogootootoo aggocatgot cottgaactt ggaaatgtca acoggagoco
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aacctcaact acattgtage teagteeaac gactaaccet gaaatggggg tgtteeagee
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tgccaacctt gccgtccgac ctcctccgcc cccatgcggt gaccccgtcc gtgtctgtgt
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aggtgcgtgg agaaggctcc gacgtctccg aagtgcagcc cttgggatgg cattccgttg
                                                                     600
tgtgccttat tcctggagaa tctgtatacg gctcgcctat aagaaatata gcctcttcat
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720
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tccncgttwa awtttttgtt taaatcarct caattttttt aacccaataa gsccgaaatc
                                                                      1020
cggcaaatcc ccyttattaa ttccaaaaaa ataaaccsaa aawgggtttg aattttttkt
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                                                                      1140
aaaggggaaa aaacsytttt ytggggggna anggggcccc cntactttna acayccccc
                                                                      1200
ccaawcaatt tttttggggg gtcccnaaag gtccccctaa aancttttt cggaacccna
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agggganccc cccatttaaa attttnggtn
                                                                      1290
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<212> DNA
<213> Homo sapiens
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 aagccaactg agataccgtg atggtgttga tttctttcaa tgatgcttac catctatttt
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<211> 1020
<212> DNA
<213> Homo sapiens
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<222> (86)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (978)
<223> n equals a,t,g, or c
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<221> SITE
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<223> n equals a,t,g, or c
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<220>
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<222> (995)
<223> n equals a,t,g, or c
<400> 198
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                                                                         120
 sctttggagg atttgtattg agettttaca gtattcattt ttcaactcaa ggcaatqqct
                                                                         180
 ttctacacca actctaatcc ataaacgggt cttatgacat ctatgaaqta gtaqcaaqac
                                                                         240
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 attatqtaqq tagaaaaaaa tqcaaqcaaq ctqttaaaqa tcttqqatcc cattatataq
                                                                         360
 tatgtatage tgaaatetgt aatteaatea ettittetet tttateetet aaccaaaaaa
                                                                         420
 ttgtttaatt ttgcatccca aatgttttta atctttgtat attttttaaa aayccttttc
                                                                         480
 tcctcatcat tgcctttttt gtggttgtaa atagacttac ttgcactttg aagatgagtt
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 actccttgtc atcttacaaa tatgtgatat ggtaattttc ataacagatg tcagttttga
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 accaagaatt ggtgatttgt ttataagaaa aaaactggct tcatttctgt gaaattgctc
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 ttcaatgatg cttaccatct attttagcca ctgagccttt tattatttgt ctatttgtaa
                                                                         780
 agtttatttg tottaactca tttaataaat atactgttta totgtttctg aatggggact
                                                                         840
 gaactttttg gatattgata ttgatttgaa aatattttgg aattttttct acttgaaatt
                                                                         900
 ttagaaatct aatkgaaaat tctataatgt actgaaagta wggttgtgta cagtgakcac
                                                                         960
 tototaataa tatgatgnot tgooctaaan gaggngggac atgtoccact ttocaccacg
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<210> 199
<211> 524
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
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<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (75)
<223> n equals a,t,g, or c
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gatgtteete aacceagggg eggeetetge cetetacteg tgecaggeee acttgecagg
                                                                         240
 caggagccct ccccaagcct tcagggctgc tcggagtcac ctgttggaat ggactaaaag
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 gaccettgtg tgggaacagg tgetecaaac accetgetge tggetgecag geaggeeete
                                                                         360
 tggaagggaa ggggcaggac tcatcaggac ctccctggac cctgcagggc aggcagttgg
                                                                         420
 cccqaqccca agcatttggc tctgcttgcc ccaaggggac aggaagcctc ttgggcctct
                                                                         480
 tecetteetg gacaaggeec cetgeetttg ceteacataa actg
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<210> 200
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<211> 332

<212> DNA

<213> Homo sapiens

<222> (93)

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                                                                         120
 gaagggette ttgatagatt agaaaataag aatgagtgae attteetatg tgeatataag
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 atagaacctt ggtctcatcc tcctggagct aggscttaaa acagcttctg tgtttctsat
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                                                                         332
<210> 201
<211> 376
<212> DNA
<213> Homo sapiens
<400> 201
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 cagggactgg tgcaggtagg ctgagtggca gctcagtcct agaaggtctc tgaagatctg
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 gactgaggac cytgctactc cccaagccag agcccatcag ccaggcctgc tgtgagccac
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 ctgcctgtgg agtgctgagc tcaaccaaag gctggcaagc tctgggcctc atttaaggga
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                                                                         360
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 aaaaaaaaa aaaaag
<210> 202
<211> 741
<212> DNA
<213> Homo sapiens
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<221> SITE
<222> (361)
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                                                                         120
 ttttcagttg cggcctttct tctcgttctt taatttgaaa cctagataca tgcagtaaaa
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 actaggagaa tgacttttac ccttggggac agccaagttt tgttgataaa cctatttcct
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                                                                         660
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                                                                         741
<210> 203
<211> 1192
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
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<223> n equals a,t,g, or c

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				tctagagtgt		300
aatctgggac	cacaccacac	cagttctctc	cttaatccac	gtcatttgcc	ttctatccca	360
				aagaaaygaa		420
				wtttctgagt		480
				ggttgaagga		540
				ragcttagag		600
				aaaaaggcag		660
watgtgattg	gaatggaacc	cgaraagaga	gcaygctgtg	ttcttgggga	caggaaagct	720
tgygtgcacc	aagtctkaac	caccaccttc	atgggacata	grttatgtgc	tggaacatat	780
				gtggaaacgg		840
				tgctaaaaca		900
				agcctttggg		960
				taaccatagg		1020
				gtgtgcagca		1080
				ctttagccca		1140
ccttatttct	tctaaactca	ccattaatct	gaataatagt	caaatttagg	gg	1192
<210> 204						
<211> 589						
<211> 389						
<213> Homo	saniens					
(213) 1101110	acticiis					
<400> 204						
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				ttctaaattt		180
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atgacaaaac				agtacaactg		
	aaagggagat	gatacagaca	ccmgggatga		ttagccactg	240
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                                                                         360
                                                                         420
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                                                                       2280
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<211> 689
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<221> SITE
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cgattttagc ccagcaccac agggtacgtt ccagtttttc tctctttcca tagctgtaag
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gccctttctg ggaatggttc tcattctcct taatctatta ttgggtcagt tttcctgcat
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                                                                         420
gggctttgac tcccacactg tgtacccctc ttgtgtggac gccctgctgc caaaaccttc
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 agcaaacagc tttccaaatg gaagttgtca ctgtcarggs ctttacaatc agcaacagca
                                                                         540
 aaatctacat gctgctgagg gtcctgcctc attaagatgc aataaatatg taagtacata
                                                                         600
 aaaacagcaa tagaagaaac gtaatgcttt attctcaaat atgnatgtct acatagaaaa
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<211> 2377
<212> DNA
<213> Homo sapiens
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<221> SITE
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<220>
<221> SITE
<222> (902)
<223> n equals a,t,g, or c
<400> 264
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ggccaccett gegttggttt tgetgetgta etggtggege eeetgacegt ggetgtetee
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 gcctttgaag tectateete catggtgggg gagggaggag cetteeetea ggeagttggg
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                                                                         420
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                                                                         720
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 ggaatgatac taatacctcc gattttagcc cagcaccaca gggtacgttc cagtttttat
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 ttotttocat agotgtaagg coctitotgg gaatggttat cattotocti aatotattat
                                                                        2100
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tgggtcagtt ttcctgcatg tccccagcct cccatcactg ccacccactc cccacagaga
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                                                                    2220
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                                                                    2280
tttacaatca gcaacagcaa aatctacatg ctgctgaggg tcctgcctca ttaagatgca
                                                                    2340
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<211> 1193
<212> DNA
<213> Homo sapiens
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<221> SITE
<222> (5)
<223> n equals a,t,g, or c
<400> 265
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                                                                     120
agagggttaa cetgggtcaa atgcaeggat teteaceteg tacagttaeg etetecegeg
                                                                     180
gcacgtccgc gaggmyttga agtcctgagc gctcaagttt gtccgtagtc gagagaaggc
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catggaggtg ccgccaccgg caccgcggag ctttctctgt agagcattgt gcctatttcc
                                                                     300
ccgagtcttt gctgccgaag ctgtgactgc cgattcggaa gtccttgagg agcgtcagaa
                                                                     360
geggettece taegteecag agecetatta eceggaatet ggatgggace geeteeggga
                                                                     420
gctgtttggc aaagacacag tgaacactag tctgaatgta taccgaaata aagatgcctt
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aagccatttt gtaattgcag gagctgtcac gggaagtctt tttaggataa acgtaggcct
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gegtggetgg tggetggtgg cataattgga geettgetgg geacteetgt aggaggeetg
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ctgatggcat ttcagaagta ctctggtgag actgttcagg aaagaaaaca gaaggatcga
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aaggcactcc atgagctaaa actggaagag tggaaaggca gactacaagt tactgagcac
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ctccctgaga aaattgaaag tagtttacag gaagatgaac ctgagaatga tgctaagaaa
                                                                     780
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                                                                     840
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                                                                     900
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1193
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<211> 1262
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<213> Homo sapiens
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<221> SITE
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<221> SITE
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<400> 266
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                                                                     120
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gegttgtgct teagaeggga ttetgeaatt egaaageage ttgttaaaaa tgagaaggge
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 aataaacttt cacagtccag tatccaacag gaactgtgtg tgtcttaaga ccgaagttca
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                                                                         480
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                                                                         540
                                                                         600
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                                                                         720
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                                                                         840
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 taaatqcttt ttttgttatc agagattgtg tactattttt atttttaata aatgtatctt
                                                                        1020
 coefficient quittagatt tactitigate tregitaate trattectiga tigatetagaa
                                                                        1080
 cattagteat caacattaca tgtttcatge ttcagatatt ttactgettg tgtccttatt
                                                                        1140
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<210> 267
<211> 1179
<212> DNA
<213> Homo sapiens
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<222> (18)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c
<400> 267
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caacggctcg gcagccagcc atgtcctgca cccaggacag cggccctggg ctacaaggac
                                                                         180
 ctggacctca tcttcctgcg ccgacctgcg cggggaaggg gagtttcaga ctgtgaagga
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 accactcacg ctcaaggaag cttatgtgca gaaaatggtt aaagtgtgca atgactctga
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                                                                         420
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                                                                         480
                                                                         540
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 aatcggggag agcgtctatg gcgatttcca ggaagccttt gatcaccttt gtaacaagat
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 ttccaggttt ttcatcgact tctcagacat tggagagcag cagagaaaac tggagtccta
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                                                                         840
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 cottatoaco atgorggota toogggtgtt agotgaccaa aatgtoatto otaatgtggo
                                                                         960
 taatgtcact tgctattacc agccagcccc ctatgtagca gatgccaact ttagcaatta
                                                                        1020
 ctacattgca caggttcagc cagtattcac gtgccagcaa cagacctact ccacttggct
                                                                        1080
 accetgeaat taagaateat ttaaaaatgt eetgtgggga agceatttea gacaagacag
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<210> 268
<211> 1162
<212> DNA
<213> Homo sapiens
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<221> SITE
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<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1151)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1154)
<223> n equals a,t,g, or c
<400> 268
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                                                                         120
 caacggeteg geagecagee atgteetgea eccaggacag eggeeetggg etacaaggae
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 ctggacctca tcttcctgcg ccgacctgcg cggggaaggg gagtttcaga ctgtgaagga
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 cgtcgtgctg gactgcctgt tggacttctt acccgagggg gtgaacaaag agaagatcac
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 ggattccctc cggaggcagt ttgaattcag tgtagattct tttcaaatca aattagactc
                                                                         480
 tottotgoto tittatgaat gitcagagaa cocaatgact gagacattic accocacaat
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 aatcggggag agcgtctatg gcgatttcca ggaagccttt gatcaccttt gtaacaagat
                                                                         600
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                                                                         660
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                                                                         840
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 cettateace atgetggeta teegggtgtt agetgaceaa aatgteatte etaatgtgge
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 taatgtcact tgctattacc agccagcccc ctatgtagca gatgccaact ttagcaatta
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 ctacattgca caggttcagc cagtattcac gtgccagcaa cagacctact ccacttggct
                                                                         1080
 accetgeaat taagaateat ttaaaaaatgt eetgtgggga ageeatttea gacaagacag
                                                                         1140
 gagagaaaaa naangaaaag ag
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<210> 269
<211> 735
<212> DNA
<213> Homo sapiens
<400> 269
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gccaatgcca tttactgcct tgtgacgttg gtcttctttt actcatctgc ctcattttgg
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                                                                         360
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                                                                         420
 geoctttaec teetgtgggt gaatgtgetg ggeocetggt teactgeaga cagtggcace
                                                                         480
 ccagcaccag agcacaatga gaaacggcag cgccgacagg agcggcggca gatgaagcgg
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 ttgggtatac ttatactcta tagggtcgtt gaataaatgg cttagaatgt gaaaaaaaaa
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 aaaaaaaaa atttt
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<211> 783
<212> DNA
<213> Homo sapiens
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<221> SITE
<222> (654)
<223> n equals a,t,g, or c
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                                                                         120
aagaagcaga tatttgaaga gaacagagag actctgaagt tctacctgcg gatcatactg
                                                                         180
 ggggccaatg ccatttactg ccttgtgacg ttggtcttct tttactcatc tgcctcattt
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                                                                         360
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                                                                         420
 ggatgtgatc ctactgacag ccatcgtgca ggtgctcagc tgcttctctc tctatgtctg
                                                                         480
 gteettetgg ettetggete caggeeggge eetttacete etgtgggtga atgtgetggg
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 cocctggttc actgcagaca gtggcacccc agcaccagag cacaatgaga aacggcagcg
                                                                         600
                                                                         660
 ccgacaggag cggcggcaga tgaagcggtt atagccattg acgatttkgc sacnrgccac
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 ata
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<221> SITE
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (92)
<223> n equals a,t,g, or c
<400> 271
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                                                                          60
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ggattgcccg gccctccccc ccggatggaa gaaggaggaa gtgatccgaa aatctgggct
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                                                                         240
 gcctcagttg gcaaggtacc tgggaaatac tgttgatctc agcagttttg acttcagaac
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 caatcaaaat aagggtaaac cagacttgaa tacaacattg ccaattagac aaacagcatc
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                                                                         480
 cccacaacga atgaatgaac agccacgtca gcttttctgg gagaagaggc tacaaggact
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                                                                         840
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                                                                        960
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                                                                        1140
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 taqcacttac qtaaaacatt tgtttccccc acagttttaa taagaacaga tcaggaattc
                                                                        1260
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<210> 272
<211> 1455
<212> DNA
<213> Homo sapiens
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 aaagatgatg cctagtaaat tacagaagaa caaacagaga ctgcgaaacg atcctctcaa
                                                                         180
 tcaaaataag ggtaaaccag acttgaatac aacattgcca attagacaaa cagcatcaat
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 tttcaaacaa ccggtaacca aagtcacaaa tcatcctagt aataaagtga aatcagaccc
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 acaacgaatg aatgaacagc cacgtcagct tttctgggag aagaggctac aaggacttag
                                                                         360
 tgcatcagat gtaacagaac aaattataaa aaccatggaa ctacccaaag gtcttcaagg
                                                                         420
 agttggtcca ggtagcaatg atgagaccct tttatctgct gttgccagtg ctttgcacac
                                                                         480
 aagetetgeg ceaateaeag ggeaagtete egetgetgtg gaaaagaace etgetgtttg
                                                                         540
 gcttaacaca tctcaacccc tctgcaaagc ttttattgtc acagatgaag acatcaggaa
                                                                         600
 acaggaagag cgagtacagc aagtacgcaa gaaattggaa gaagcactga tggcagacat
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 cttgtcgcga gctgctgata cagaagagat ggatattgaa atggacagtg gagatgaagc
                                                                         720
                                                                         780
 ctaagaatat gatcaggtaa ctttcgaccg actttcccca agagaaaatt cctagaaatt
                                                                         840
 gaacaaaaat gtttccactg gcttttgcct gtaagaaaaa aaatgtaccc gagcacatag
                                                                         900
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 attcaaaaaa tcatgtttat tttgagtcct aggacttaaa attagtcttt tgtaatatca
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 ataaatttcc cagttaaaga ttattgtgac ttcactgtat ataaacatat ttttatactt
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 tattgaaagg ggacacctgt acattcttcc atcrtcactg taaagacaaa taaatgatta
                                                                        1200
 tattcacaga ctgattggaa ttctttctgt tgaaaagcac acacaataaa gaacccctcg
                                                                        1260
 ttageettee tetgatttae atteaactet gateeegggg cettaggttt gaèatgggag
                                                                        1320
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gtgggaggaa gatagcgcat atatttgcag tatgaactat tgcctctggg acgttgtgag

gaattgtgct ttcaccagaa tttctaagga tttctggctt aaatatcacc tagcctgtgg

1380

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taatttttt tccct
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<210> 273
<211> 1086
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (1073)
<223> n equals a,t,g, or c
<400> 273
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 tatgtgctct tcagggcggg caccgtgttg cattcatctt tgtaccccca gcatctagca
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gtgttggcat gtagtaggca ctcaagaaat gtgtgttgaa tgaacgatgc ctgtgacaag
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 caageggact ttattettte etgaceettg etcetatgac acaceteete etgactgeca
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 ctgtcactcc ttcagagcag aactcctcta gggaacctgg atgggaaaca gccatggcca
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 acccagaggt tacccagcag accatagagc tgaaggaaga gtgcaaagac tttgtggaca
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 agctagaaag gtatcgggtt gaatatgaag ctttgtgtaa agtagaagca gaacaaaatg
                                                                       720
 aatttattga ccaatttatt tttcagaaat gaactgaaaa tttcgctttt atagtaggaa
                                                                        780
 ggcaaaacaa aaaaaagcct ctcaaaacca aaaaaacctc tgtagcattc cagcggcttg
                                                                        840
 accaatgacc tatgtcacaa gaggtggcgt gtaaggaatg cagcccctg aagacagcac
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                                                                       960
 tgtacgttct cacctcttat gcttagttgg aactaagcag tttgtaaact ttcatccttt
                                                                       1020
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                                                                      1080
 ttgatg
                                                                       1086
<210> 274
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<212> DNA
<213> Homo sapiens
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                                                                        120
 agcoggggta tgtggctgac atatgcattg ggagttggct tgcttcatat tgtcttactc
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 agcattecet tetteagtgt teetgttget tggaetttaa caaatattat acataatetg
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 gggatgtacg tatttttgca tgcagtgaaa ggaacacctt tcgaaactcc tgaccagggt
                                                                       300
 aaaagcaagg ctcctaactc attgggaaca actggactat ggagtacagt ttacatcttc
                                                                       360
 acggaagttt ttcacaattt ctccaataat tctatatttt ctggcaagtt tctatacgaa
                                                                        420
gtatgatcca actcacttca tcctaaacac agcttctctc ctgagtgtac taattcccaa
                                                                        480
 aatgccacaa ctacatggtg ttcggatctt tggaattaat aagtattgaa atgttttgaa
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 cttcaagtgc tgttttgaag tgcagatttc cattaaatga tgcctctgtt taatacacct
                                                                       720
ggtacatttc tgaagaggg ctttataagc aggctgggca ggcccagctt ataagttaaa
                                                                       780
 gggcatcaca gtgagggtgt agtagataaa ttcaaggaaa taagagattt gtaagaaact
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 aggaccaget taaettataa tgaatgggea ttgtgttaag aaaagaacat ttecagteat
                                                                       900
tragetytyg ttatttaaag ragarttara tytaaaccyg aatcetetet ataraagttt
                                                                       960
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<210> 275
<211> 1234
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (1219)
<223> n equals a,t,g, or c
<400> 275
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                                                                          60
gaaaaaataa tootogcaac acaggtacot tgtcatgtca gaattggggg tgttaggttg
                                                                         120
ccagttgtat cagtgttgat tcatttcatt acttcctaca gagcaaacat gaacgttgga
                                                                         180
gttgcccaca gtgaagtgaa tccaaatacc cgtgtcatga acagccgggg tatgtgqctg
                                                                         240
acatatgcat tgggagttgg cttgcttcat attgtcttac tcagcattcc cttcttcagt
                                                                        300
gttcctgttg cttggacttt aacaaatatt atacataatc tggggatgta cgtatttttg
                                                                        360
catgoagtga aaggaacaco tttcgaaact cotgaccagg gtaaagcaag gotootaact
                                                                        420
cattgggaac aactggacta tggagtacag tttacatctt cacggaagtt tttcacaatt
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atoctaaaca cagcttotot cotgagtgta ctaattooca aaatgocaca actacatggt
                                                                        600
gttcggatct ttggaattaa taagtattga aatgttttga aactgaaaaa aaattttaca
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gctactgaat ttcttataag gaaggagtgg ttagtaaact gcactgtttc tstgataatg
                                                                        720
tgaaatgaga agtatttaca ttggagggcc aatggctggt ccttcaagtg ctgttttgaa
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tagtagataa attcaaggaa ataagagatt tgtaagaaac taggaccagc ttaacttata
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atgaatgggc attgtgttaa gaaaagaaca tttccagtca ttcagctgtg gttatttaaa
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gcagacttac atgtaaaccg gaatcctctc tatacaagtt tattaaagat tatttttatt
                                                                        1080
accrtacata tttckcttgt tttatgtaag yggatgtata tcctcttgtt ttatacaagc
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cagttcccac ttatgagggt acttttttgg ttttgctggg cttaatattg tgtattggtc
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aatgaggcca tttttacant tattaacgtt acag
                                                                        1234
<210> 276
<211> 574
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c
<400> 276
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tatggatccc catgaagccc tactacacca aagtttacca ggagatttgg ataggaatgg
                                                                         120
ggctgatggg cttcatcgtt tataaaatcc gggctgctga taaaagaagt aaggctttga
                                                                         180
aagottcago gootgotoot ggtoatcact aaccagattt acttggagta catgtgaaag
                                                                         240
aaaacgtcag tctgcctgta aatttcagca agccgtgtta gatggggagc gtggaacgtc
                                                                         300
actgtacact tgtataagta ccgtttactt catggcatga ataaatggat ctgtgagatg
                                                                         360
cactgctacc tggtactgct ttcagtgtgt tccccctcag ccctccggcg tgtcaggcat
                                                                         420
actictgagta gataatttgt catgcagege atgcaatcag aatctcactg agecacccat
                                                                         480
cattgtgaaa taattacctc agttgtacag gacttggtga tcaggatcca ggcactcact
                                                                         540
tgtattctac tgctcaataa acgtttatta aact
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<210> 277
<211> 1731
<212> DNA
<213> Homo sapiens
<220>
<221> SITE
<222> (492)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1676)
<223> n equals a,t,g, or c
<400> 277
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 cttcaagcac tgtgtttttc tgctgtgata tgcaggaaag gttcagacca gccatcaagt
                                                                         120
 atttttgggga tattattagc gtgggacaga gattgttgca aggggcccgg attttaggaa
                                                                         180
 ttcctgttat tgtaacagaa caatacccta aaggtcttgg gagcacggtt caagaaattg
                                                                         240
 atttaacagg tgtaaaactg gtacttccaa agaccaagtt ttcaatggta ttaccagaag
tagaagcggc attagcagag attcccggag tcaggagtgt tgtattattt ggagtagaaa
                                                                         360
 ctcatgtgtg catccaacaa actgccctgg agctagttgg ccgaggagtc gaggttcaca
                                                                         420
 ttgttgctga tgccacctca tcaagaagca tgatggacag gatgtttgcc ctcgagcgtc
                                                                         480
 tegeterare engggateat agtgaceaeg agtgnagget gttetgette agetggtage
                                                                         540
 tgataaggac catccaaaat tcaaggaaat tcagaatcta attaaggcga gtgctccaga
                                                                         600
 gtcgggtctg ctttccaaag tataggacat ttgaagaact ggtatgctac tcactggtga
                                                                         660
 aggacagtca ggtgaaggac tgtaagccca cacaagctct tottatotot actagaatta
                                                                         720
 aaatgttaag tcaaaaacgg ctcctttttt gcgcctccta gtgaacttaa ccagctagac
                                                                         780
cattigagta ccagcattta gitacaaacg tcaaaggett ccggigetge ttaccttect
                                                                         840
 tttttgttaa tgtgctttta tttattaaaa aaaattacaa tgaagatgcc tgttttgtct
                                                                         900
 ctactgtgta ctctgatcgt atctttccaa agtgcagact cttgtgaagt tttcttaaat
                                                                         960
 tgttcacttt aaagaaaatg acgtaccaac aatgatttqq cttttatatt actgtaaqat
                                                                        1020
 gttataatgt taatgtggat gtagtgcttt tactttacag attgattgga ataagattat
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 tgcatatgaa tttacccaca ggactctgaa tcatgttacc cactcccctc acaatgttgt
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 ccacttagtg agttgcattg atctatccgt accaaatgat gttgaataat tacatatctt
                                                                        1200
 totkgactat actgatttct tattttggtc actattacta aatctctgtt aatattctct
                                                                        1260
 cttttaactg aaaagggatg ggatagaagg gtttgcaatg ccatattatt ggtggagggc
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 tgttttaaca tctttgaagt atggcttgct gaatatcttt accaacatct tgaatatata
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                                                                        1620
ctgtctttta tattaaagta attaaagaaa atgtattgtg attgaaatta ttttgncctc
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<210> 278

<211> 1320

<212> DNA

<213> Homo sapiens

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<220>
<221> SITE
<222> (743)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1275)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1303)
<223> n equals a,t,g, or c
<220>
<221> SITE
<222> (1316)
<223> n equals a,t,g, or c
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 ctagggcagt agcccaggac tcctagtcgc cggcttcagg tcactgccgg ctgaacggag
                                                                         180
 ctgccgtcgc catgtttggc tgcttggtgg cggggaggct ggtgcaaaca gctgcacagc
                                                                          240
 aagtggcaga ggataaattt gtttttgact tacctgatta tgaaagtatc aaccatgttg
                                                                         300
tggtttttat getgggaaca atcecattte etgagggaat gggaggatet gtetaetttt
                                                                         360
 cttatcctga ttcaaatgga atgccagtat ggmaactcct aggatttgtc acgaatggga
                                                                         420
 agccaagtgc catcttcaaa atttcaggtc ttaaatctgg agaaggaagc caacatcctt
                                                                          480
 ttggagccat gaatattgtc cgaactccat ctgttgctca gattggaatt tcagtggaat
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 cattcactca gttcacacaa aagatgttgg acaatttcta caattttgct tcatcatttg
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 ctgtctctca ggcccagatg acaccaagcc catctgaaat gttcattccg gcaaatgtgg
                                                                         720
 ttctgcaaat ggtatgaggc atnttctgtc tccaatatta aggcttttta taactgaata
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 catcagcact gcatgccatt aaagtatgta ctatagagat ctgatgagaa acagttctta
                                                                         900
 ccctaaatat tttgttatat tgtcgccatt atgaatttat aaagacagga aaatatagtt
                                                                         960
 gcctatgttt tagggaccac tattaaagct tataaatatt tgtgtatttt catttagaag
                                                                         1020
 taccatctat gagagtagtt tatactgcac tgtgtacatg aatggctaat gaatctattt
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 tccaactttc ccgtgtttta tagatatttc ttttcacttt gagtatccta gagatgggag
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 gatgcctagg aagagtttgt tgagaagtgg taccatggtg tagcatggga gagcattggg
                                                                         1200
 aatgcactag gtttgaattt ggcataatgg tagctatgtg accctgagca aatttctctc
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<211> 515
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<213> Homo sapiens
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<221> SITE
<222> (465)
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<220>
<221> SITE
<222> (467)
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2160

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                                                                         420
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                                                                         660
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                                                                          720
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   tttcagcagt gtgctacagt ttttaggatt atataagaaa actggtaaac tggtatttct
                                                                            180
   tggattggat aatgcaggaa aaacaacatt gctacacatg ctaaaagatg acagacttgg
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   acaacatgic ccaacattac atcccacttc cgaagaactg accattgctg gcatgacgtt
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   tacaactttt gatctgggtg gacatgttca agctcgaaga gtgtggaaaa actaccttcc
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   tgctatcaat ggcattgtat ttctggtgga ttgtgcagac cacgaaaggc tgttagagtc
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   aaaagaagaa cttgattcac taatgacaga tgaaaccatt gctaatgtgc ctatactgat
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   tcttgggaat aagatcgaca gacctgaagc catcagtgaa gagaggttgc gagagatgtt
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  <211> 1327
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  <220>
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  <223> n equals a,t,g, or c
  <220>
  <221> SITE
  <222> (924)
  <223> n equals a,t,g, or c
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   tttctgattt tracatgacc ttgagcaggt ttgcatataa tggaaagcga tgcccttctt
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   cttacaatat tctggataat agcaagatca tcagtgagga gtgtcggaaa gagctcacag
                                                                           240
   cgctccttca ccactattac ccaattgaga tcgacccaca ccggaccgtc aaggagaagc
                                                                           300
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                                                                         420
 agaccttctt caacacactc taccataaca acattcccct tttcatcttt tctgcgggca
                                                                         480
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                                                                         540
 togtgtotaa ctacatggat tttaatgaag atggttttct ccagggattt aagggccagc
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                                                                         900
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naaaa
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<211> 1530

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens
<220>
<221> SITE
<222> (163)
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<221> SITE
<222> (1533)
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<212> DNA

<213> Homo sapiens

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<211> 712
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<213> Homo sapiens

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<210> 321

<220> <221> SITE

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Ser Pro Asn Thr Leu Leu Leu Ala Ala Arg Gln Ala Leu Trp Lys Gly
Arg Gly Arg Thr His Gln Asp Leu Pro Gly Pro Leu Gln Gly Arg Gln
Leu Gly Pro Glu Pro Lys His Leu Ala Leu Leu Pro Pro Arg Gly Gln
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<210> 322
<211> 28
<212> PRT
<213> Homo sapiens
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<210> 323
<211> 64
<212> PRT
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<213 > Homo sapiens
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Leu
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Phe Ala Val Leu Gly Leu Leu Ala Ala Gly Val Thr Leu Leu Leu Pro
Glu Thr Lys Gly Val Ala Leu Pro Glu Thr Met Lys Asp Ala Glu Asn
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Gln Thr Ser Glu Pro Ser Gly Thr
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<220>

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<222> (64)

<223> Xaa equals stop translation

<400> 330

Met Cys Leu Glu Cys Trp Ala Glu Asn Leu Gly Pro His His Thr Ser 1 5 10 15

Ser Leu Leu Asn Pro Arg His Leu Pro Ser Ile Pro Ala Met Phe Pro 20 25 30

Val Ser Ser Gly Cys Phe Gln Glu Gln Glu Met Asn Lys Ser Leu 35 40 45

Val Ser Cys Leu Phe Val Leu His Phe Val Leu His Cys Ile Phe Xaa 50 55 60

<210> 331

<211> 196

<212> PRT

<213> Homo sapiens

<400> 331

Met Leu Ser Thr Ser Glu Tyr Ser Gln Ser Pro Lys Met Glu Ser Leu 1 5 10 15

Ser Ser His Arg Ile Asp Glu Asp Gly Glu Asn Thr Gln Ile Glu Asp 20 25 30

Thr Glu Pro Met Ser Pro Val Leu Asn Ser Lys Phe Val Pro Ala Glu 35 40 45

Asn Asp Ser Ile Leu Met Asn Pro Ala Gln Asp Gly Glu Val Gln Leu 50 55 60

Ser Gln Asn Asp Asp Lys Thr Lys Gly Asp Asp Thr Asp Thr Arg Asp 65 70 75 80

Asp Ile Ser Ile Leu Ala Thr Gly Cys Lys Gly Arg Glu Glu Thr Val 85 90 95

Ala Glu Glu Val Cys Ile Asp Leu Thr Cys Asp Ser Gly Ser Gln Ala
100 105 110

```
Val Pro Ser Pro Ala Thr Arg Ser Glu Ala Leu Ser Ser Val Leu Asp
                            120
Gln Glu Glu Ala Met Glu Ile Lys Glu His His Pro Glu Glu Gly Ser
    130
                        135
                                            140
Ser Gly Ser Glu Val Glu Glu Ile Pro Glu Thr Pro Cys Glu Ser Gln
Gly Glu Glu Leu Lys Glu Glu Asn Met Glu Ser Val Pro Leu His Leu
                165
                                    170
Ser Leu Thr Glu Thr Gln Ser Gln Gly Leu Cys Leu Arg Arg His Pro
Lys Lys Lys
       195
<210> 332
<211> 252
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (163)
<223> Kaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (252)
<223> Xaa equals stop translation
<400> 332
Met Gly Gly Asp Leu Val Leu Gly Leu Gly Ala Leu Arg Arg Lys
Arg Leu Leu Glu Gln Glu Lys Ser Leu Ala Gly Trp Ala Leu Val Leu
Ala Xaa Xaa Gly Ile Gly Leu Met Val Leu His Ala Glu Met Leu Trp
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		35					40					45			
Phe	Gly 50	Gly	Cys	Ser	Ala	Val 55	Asn	Ala	Thr	Gly	His 60	Leu	Ser	qaA	Thr
Leu 65	Trp	Leu	Ile	Pro	Ile 70	Thr	Phe	Leu	Thr	Ile 75	Gly	Tyr	Gly	Asp	Val 80
Val	Pro	Gly	Thr	Met 85	Trp	Gly	rys	Ile	Val 90	Cys	Leu	Cys	Thr	Gly 95	Val
Met	Gly	Val	Cys 100	Cys	Thr	Ala	Leu	Leu 105	Val	Ala	Val	Val	Ala 110	Arg	Lys
Leu	Glu	Phe 115	Asn	Lys	Ala	Glu	Lys 120	His	Val	His	Asn	Phe 125	Met	Met	Asp
Ile	Gln 130	Tyr	Thr	Lys	Glu	Met 135	Lys	Glu	Ser	Ala	Ala 140	Arg	Val	Leu	Gln
Glu 145	Ala	Trp	Met	Phe	Tyr 150	Lys	His	Thr	Arg	Arg 155	Lys	Glu	Ser	His	Ala 160
Ala	Arg	Xaa	His	Gln 165	Arg	Xaa	Leu	Leu	Ala 170	Ala	Ile	Asn	Ala	Phe 175	Arg
Gln	Val	Arg	Leu 180	Lys	His	Arg	Lys	Leu 185	Arg	Glu	Gln	Val	Asn 190	Ser	Met
Val	Asp	Ile 195	Ser	Lys	Met	His	Met 200	Ile	Leu	Tyr	Asp	Leu 205	Gln	Gln	Asn
Leu	Ser 210	Ser	Ser	His	Arg	Ala 215	Leu	Glu	Lys	Gln	Ile 220	Asp	Thr	Leu	Ala
Gly 225	Lys	Leu	Asp	Ala	Leu 230	Thr	Glu	Leu	Leu	Ser 235	Thr	Ala	Leu	Gly	Pro 240
Arg	Gln	Leu	Pro	Glu 245	Pro	Ser	Gln	Gln	Ser 250	Lys	Xaa				
<211 <212 <213 <220 <221 <222	L> SI 2> (6	RT omo s TE 58)	-				latio								
		-	inars	5 500	دی وړ	.amsi	Lack	711							
)> 33 Trp		Cys	Arg 5	Gly	Lys	Leu	Ser	Phe 10	Pro	Leu	Phe	Ala	Val 15	Val
Ile	Val	Ser	Cys 20	Arg	Lys	Asp	Gly	Pro 25	Asp	Ala	Ala	Ala	Ala 30	Pro	Ala

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Val Ile Lys Asn Asn Ser His Tyr Gln Thr Ser Lys Ala Leu Glu Leu 35 40 45
```

Glu Lys Thr Thr Glu Asn Lys Glu Ser Asn Pro Phe Ile Leu Gln Val

Asn Lys Leu Xaa 65

<210> 334

<211> 84

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (84)

<223> Xaa equals stop translation

<400> 334

Met Gly Glu Gly Lys Asn Gly Phe Gly Gly Phe Val His Thr Ala Asp 1 5 10 15

Ala Cys Trp Glu Gly Val His Ser Glu Pro Val Cys Arg Thr Val His
20 25 30

Thr Val His Thr Cys His His Gln Ala Phe Leu Val Leu Ile Gly Trp 35 40 45

Ser Lys Ser Gly Lys Glu Arg Lys Glu Ala Phe Leu Thr Ala Ile Ile 50 55 60

Leu Asn Ser Arg Ser Ile His Ile Ser Cys Ser Trp Pro Pro Ser Pro 65 70 75 80

Val Pro Gln Xaa

<210> 335

<211> 36

<212> PRT

<213> Homo sapiens

<400> 335

Met Leu Leu Ile Asn Leu Leu Trp Leu Val Thr Met Ile Lys Ser Val

Ile Asn Asn Asn Ile Ile Leu Phe Leu Lys Lys Lys Ser Leu Phe Phe 20 25 30

Ile Asp Ser Val

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<211> 63
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (63)
<223> Xaa equals stop translation
<400> 336
Met Thr Phe Pro Phe Glu Lys Lys Ile Val Ala Phe Ser Ala Phe Tyr
Leu Ile Pro Gly Glu Ser Arg Leu Ala Pro Thr Phe Asn Pro Ser Ala
Asp Met Thr Val Ile Leu Arg Gly Arg Ala Gln His Lys Thr Ala Met
Leu Glu Ser Tyr Asn Trp Lys Val Ser Cys Gln Leu Arg Glu Xaa
<210> 337
<211> 35
<212> PRT
<213> Homo sapiens
<400> 337
Met His Ser Lys Gly Ser Ser Leu Leu Phe Leu Pro Gln Leu Ile
. 1
Leu Ile Leu Pro Val Cys Ala His Leu His Glu Glu Leu Asn Cys Cys
                                25
Phe His Arg
         35
<210> 338
<211> 23
<212> PRT
<213> Homo sapiens
Met Gly Ala Leu Val Leu Leu Cys Leu Leu Val Gly Val Gln Gln
Ser Gly Ser Val Trp Asp Ser
             20
<210> 339
<211> 40
<212> PRT
<213> Homo sapiens
<400> 339
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Met Gln Ser Ala Glu Ile Leu Ser Trp Thr Asp Val Leu His Asp Phe
                                     10
Leu Phe Ser Leu Phe Leu Trp Pro Ala Phe Glu Asp Arg Ala Leu Leu
                                 25
Ile Phe Thr Leu Asn Gln Ile Val
         35
<210> 340
<211> 111
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (111)
<223> Xaa equals stop translation
Met Gln Ser Leu Val Gln Trp Gly Leu Asp Ser Tyr Asp Tyr Leu Gln
Asn Ala Pro Pro Gly Phe Phe Pro Arg Leu Gly Val Ile Gly Phe Ala
Gly Leu Ile Gly Leu Leu Leu Ala Arg Gly Ser Lys Ile Lys Lys Leu
Val Tyr Pro Pro Gly Phe Met Gly Leu Ala Ala Ser Leu Tyr Tyr Pro
                         55
Gln Gln Ala Ile Val Phe Ala Gln Val Ser Gly Glu Arg Leu Tyr Asp
                     70
Trp Gly Leu Arg Gly Tyr Ile Val Ile Glu Asp Leu Trp Lys Glu Asn
                                     90
Phe Gln Lys Pro Gly Asn Val Lys Asn Ser Pro Gly Thr Lys Xaa
            1.00
<210> 341
<211> 106
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (80)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 341
Met Ala Pro Ser Leu Leu Leu Leu Ala Pro Leu Cys Ser Leu Glu Ala
Val Leu Ser Ser Pro Leu Glu Lys Gln Cys Gln Leu Pro Gly Ile Phe
Cys Gln Leu Gln Leu Pro Cys Pro Leu Leu Ser Ala Gln Leu Leu
Lys Gly Ile Val Xaa Pro Arg Cys Pro Ala Ser Leu Pro Gln Pro Pro
His Pro Ala Pro Ser Trp His Leu Pro Leu His Cys Thr Glu Arg Xaa
Pro His His Leu Pro Leu Gln Gly Gly Ser Ser Asn Met Glu Glu Xaa
Asn Tyr Arg Gly Tyr Xaa Asp Ala Gln Leu
            100
<210> 342
<211> 50
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (50)
<223> Xaa equals stop translation
<400> 342
Met Thr Thr Cys Leu Phe Gly Leu Leu Ser Cys Glu Met Ser Ala Gln
Val Ser Gln Lys Ser Cys Val Tyr Asp Glu Ser Glu Cys Phe Ser Ser
             20
Val Gly Gln Leu Leu Ala Leu Leu Ile Leu Val Tyr Val Leu Pro Ser
Ile Xaa
     50
```

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<211> 48
  <212> PRT
  <213> Homo sapiens
  <400> 343
 Met Leu Trp Lys Cys Ser Gln Asn Ile Ala Arg Cys Leu Leu Leu
 Leu Ala Leu Val Glu Ile Lys Leu Glu Asp Leu Gln Ser Gln Leu His
  Pro Thr Trp Lys Ser Ile Pro Gly Pro Ser Pro Arg Asn Gln His Arg
                               40
 <210> 344
 <211> 41
<212> PRT
 <213> Homo sapiens
  <220>
 '<221> SITE
  <222> (41)
  <223> Xaa equals stop translation
  <400> 344
  Met Leu Ile Pro Leu Gln Cys Leu Phe Ser Ser Asp Arg Met Leu Thr
  Phe Leu Thr Pro Trp Gln Lys Gly Glu Lys Cys Val Leu Gly Trp Val
  Thr Lys Phe Leu Ser Glu Ile Ser Xaa
           35
  <210> 345
  <211> 76
  <212> PRT
  <213> Homo sapiens
  <400> 345
  Met Thr Phe Ser Ser Leu Lys Leu Phe Val Leu Thr Cys Ile Ile Lys
                                       10
  Gly Leu Glu Arg Phe Ile Ile Leu Arg Glu Val Cys Asn Gln Glu Ile
  Gln Arg Ser Leu Ser Ser Asn Leu Val His Val Leu Leu Gln Pro Ala
  Thr Phe Lys Asp Val Leu Val Thr Glu Ile Ile Cys Leu Cys Met Cys
  Leu Tyr Ser Ile Lys Tyr Met Pro Pro Gln Lys Lys
```

70

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<223
<400
Met
    1
Val

Asp
Pro
Ile 65
Leu
<210
<211
<211
<211
<400
Met
    1
Val
</pre>
```

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<210> 346
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<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 346

Met Ala Gly Ala Ser Leu Gly Ala His Arg Ala Phe Gly Gly Leu Arg
1 5 10 15

Val Leu Thr Phe Asp Phe Leu Gln Val Gly Gly Lys Pro Asp His Asp 20 25 30

Asp Gln Ser Leu His Ile Leu Asp Leu His Gly Ala Asp Pro Ala Leu 35 40 45

Pro Gly Ser His Gln Val Tyr Ala Thr Thr Phe Cys Ser Lys Phe Arg 50 55 60

Ile Arg Val Thr Ser Gly Glu His Cys Pro Gln Xaa Asn Ala Asn Gly 65 70 75 80

Leu Ala Ala

<210> 347

<211> 42

<212> PRT

<213> Homo sapiens

<400> 347

Met Ala Lys Ile Ser Pro Phe Glu Val Val Lys Arg Thr Ser Val Pro 1 5 10 15

Val Leu Val Gly Leu Val Ile Val Ile Val Ala Thr Glu Leu Met Val 20 25 30

Pro Gly Thr Ala Ala Ala Val Thr Gly Lys
35 40

<210> 348

<211> 26

<212> PRT

<213> Homo sapiens

<400> 348

Met Arg Leu Phe Phe Ile Gly Phe Leu Leu Leu Phe Ser Phe Gly Leu
1 5 10 15

Leu Arg Gln Pro Ser Leu Ser Ala Glu His
20 25

<210> 349

<211> 26

<212> PRT

<213> Homo sapiens

<400> 349

Met Val Phe Ser Val Ser Ser Ala Leu Ala Leu Leu Leu Met Leu Leu 1 5 10 15

Arg Ser Ser Asp Leu Ala Lys Lys Thr Glu 20 25

<210> 350

<211> 157

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (157)

<223> Xaa equals stop translation

<400> 350

Met Ser Leu Glu Phe Tyr Gln Lys Lys Lys Ser Arg Trp Pro Phe Ser 1 5 10 15

Asp Glu Cys Ile Pro Trp Glu Val Trp Thr Val Lys Val His Val Val 20 25 30

Ala Leu Ala Thr Glu Gln Glu Arg Gln Ile Cys Arg Glu Lys Val Gly

Glu Lys Leu Cys Glu Lys Ile Ile Asn Ile Val Glu Val Met Asn Arg 50 55 60

His Glu Tyr Leu Pro Lys Met Pro Thr Gln Ser Glu Val Asp Asn Val 65 70 75 80

Phe Asp Thr Gly Leu Arg Asp Val Gln Pro Tyr Leu Tyr Lys Ile Ser 85 90 95

Phe Gln Ile Thr Asp Ala Leu Gly Thr Ser Val Thr Thr Thr Met Arg
100 105 110

Arg Leu Ile Lys Asp Thr Leu Pro Ser Glu Arg Arg Trp Ile Ser Gly 115 120 125

Ser Ser Leu Met Ala Pro Arg Pro Trp Leu Leu Gly Ile Ala Leu Leu 130 135 140

Gly Leu Trp Ala Leu Glu Pro Ala Leu Gly His Trp Xaa 145 150

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<210> 351
<211> 520
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (385)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (520)
<223> Xaa equals stop translation
<400> 351
Met Phe Leu Leu Pro Leu Pro Ala Ala Gly Arg Val Val Arg Arg
Leu Ala Val Arg Arg Phe Gly Ser Arg Ser Leu Ser Thr Ala Asp Met
                                 25
Thr Lys Gly Leu Val Leu Gly Ile Tyr Ser Lys Glu Lys Glu Asp Asp
                             40
Val Pro Gln Phe Thr Ser Ala Gly Glu Asn Phe Asp Lys Leu Leu Ala
Gly Lys Leu Arg Glu Thr Leu Asn Ile Ser Gly Pro Pro Leu Lys Ala
Gly Lys Thr Arg Thr Phe Tyr Gly Leu His Gln Asp Phe Pro Ser Val
Val Leu Val Gly Leu Gly Lys Lys Ala Ala Gly Ile Asp Glu Gln Glu
            100
Asn Trp His Glu Gly Lys Glu Asn Ile Arg Ala Ala Val Ala Ala Gly
                            120
Cys Arg Gln Ile Gln Asp Leu Glu Leu Ser Ser Val Glu Val Asp Pro
   130
Cys Gly Asp Ala Gln Ala Ala Glu Gly Ala Val Leu Gly Leu Tyr
                    150
Glu Tyr Asp Asp Leu Lys Gln Lys Lys Lys Met Ala Val Ser Ala Lys
Leu Tyr Gly Ser Gly Asp Gln Glu Ala Trp Gln Lys Gly Val Leu Phe
                                185
Ala Ser Gly Gln Asn Leu Ala Arg Gln Leu Met Glu Thr Pro Ala Asn
Glu Met Thr Pro Thr Arg Phe Ala Glu Ile Ile Glu Lys Asn Leu Lys
                        215
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Ser Ala Ser Ser Lys Thr Glu Val His Ile Arg Pro Lys Ser Trp Ile 230 235 Glu Glu Gln Ala Met Gly Ser Phe Leu Ser Val Ala Lys Gly Ser Asp 245 Glu Pro Pro Val Phe Leu Glu Ile His Tyr Lys Gly Ser Pro Asn Ala Asn Glu Pro Pro Leu Val Phe Val Gly Lys Gly Ile Thr Phe Asp Ser Gly Gly Ile Ser Ile Lys Ala Ser Ala Asn Met Asp Leu Met Arg Ala Asp Met Gly Gly Ala Ala Thr Ile Cys Ser Ala Ile Val Ser Ala Ala Lys Leu Asn Leu Pro Ile Asn Ile Ile Gly Leu Ala Pro Leu Cys Glu 330 Asn Met Pro Ser Gly Lys Ala Asn Lys Pro Gly Asp Val Val Arg Ala Lys Asn Gly Lys Thr Ile Gln Val Asp Asn Thr Asp Ala Glu Gly Arg Leu Ile Leu Ala Asp Ala Leu Cys Tyr Ala His Thr Phe Asn Pro Lys Xaa Ile Leu Asn Ala Ala Thr Leu Thr Gly Ala Met Asp Val Ala Leu 390 395 Gly Ser Gly Ala Thr Gly Val Phe Thr Asn Ser Ser Trp Leu Trp Asn 410 Lys Leu Phe Glu Ala Ser Ile Glu Thr Gly Asp Arg Val Trp Arg Met 425 420 Pro Leu Phe Glu His Tyr Thr Arg Gln Val Val Asp Cys Gln Leu Ala 440 Asp Val Asn Asn Ile Gly Lys Tyr Arg Ser Ala Gly Ala Cys Thr Ala Ala Ala Phe Leu Lys Glu Phe Val Thr His Pro Lys Trp Ala His Leu 475 470 Asp Ile Ala Gly Val Met Thr Asn Lys Asp Glu Val Pro Tyr Leu Arg 485 490 Lys Gly Met Thr Gly Arg Pro Thr Arg Thr Leu Ile Glu Phe Leu Leu 505

Arg Phe Ser Gln Asp Asn Ala Xaa

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<210> 352
<211> 39
<212> PRT
<213> Homo sapiens
<400> 352
Thr Ile Leu Phe Leu Phe Leu Gln Leu Ser Ala Leu Arg Leu Ile Val
Gly Lys Asp Ser Ile Asp Ile Asp Ile Ser Ser Arg Arg Glu Asp
Gln Ser Leu Arg Leu Asn Ala
        35
<210> 353
<211> 234
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (234)
<223> Xaa equals stop translation
<400> 353
Met Thr Ser Glu Leu Asp Ile Phe Val Gly Asn Thr Thr Leu Ile Asp
Glu Asp Val Tyr Arg Leu Trp Leu Asp Gly Tyr Ser Val Thr Asp Ala
Val Ala Leu Arg Val Arg Ser Gly Ile Leu Glu Gln Thr Gly Ala Thr
Ala Ala Val Leu Gln Ser Asp Thr Met Asp His Tyr Arg Thr Phe His
Met Leu Glu Arg Leu Leu His Ala Pro Pro Lys Leu Leu His Gln Leu
Ile Phe Gln Ile Pro Pro Ser Arg Gln Ala Leu Leu Ile Glu Arg Tyr
Tyr Ala Phe Asp Glu Ala Phe Val Arg Glu Val Leu Gly Lys Lys Leu
                                105
            100
Ser Lys Gly Thr Lys Lys Asp Leu Asp Asp Ile Ser Thr Lys Thr Gly
                            120
Ile Thr Leu Lys Ser Cys Arg Arg Gln Phe Asp Asn Phe Lys Arg Val
                        135
Phe Lys Val Val Glu Glu Met Arg Gly Ser Leu Val Asp Asn Ile Gln
```

Gln His Phe Leu Leu Ser Asp Arg Leu Ala Arg Asp Tyr Ala Ala Ile 165 170 175

Val Phe Phe Ala Asn Asn Arg Phe Glu Thr Gly Lys Lys Leu Gln 180 185 190

Tyr Leu Ser Phe Gly Asp Phe Ala Phe Cys Ala Glu Leu Met Ile Gln
195 200 205

Asn Trp Thr Leu Gly Pro Val Asp Ser Gln Met Asp Asp Met Asp Met 210 215 220

Asp Leu Asp Arg Asn Phe Ser Arg Thr Xaa 225 230

<210> 354

<211> 169

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (169)

<223> Xaa equals stop translation

<400> 354

Met Ala Ala Val Ala Gly Met Leu Arg Gly Gly Leu Leu Pro Gln
1 5 10 15

Ala Gly Arg Leu Pro Thr Leu Gln Thr Val Arg Tyr Gly Ser Lys Ala
20 25 30

Val Thr Arg His Arg Arg Val Met His Phe Gln Arg Gln Lys Leu Met 35 40 45

Ala Val Thr Glu Tyr Ile Pro Pro Lys Pro Ala Ile His Pro Ser Cys 50 60

Leu Pro Ser Pro Pro Ser Pro Pro Gln Glu Glu Ile Gly Leu Ile Arg
65 70 75 80

Leu Leu Arg Arg Glu Ile Ala Ala Val Phe Gln Asp Asn Arg Met Ile 85 90 95

Ala Val Cys Gln Asn Val Ala Leu Ser Ala Glu Asp Lys Leu Leu Ile 100 105 110

Ala Thr Pro Ala Ala Glu Thr Gln Asp Pro Asp Glu Gly Leu Pro Gln 115 120 125

Pro Gly Pro Glu Ser Pro Ser Trp Arg Ile Pro Ser Thr Lys Ile Cys 130 135 140

Cys Pro Phe Leu Trp Gly Thr Thr Cys Cys Trp Ser Val Lys Ser Pro 145 150 155 160

Arg Ser Arg Arg Trp Tyr Gly Ser Xaa

<212> PRT

<213> Homo sapiens

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<210> 355
<211> 43
<212> PRT
<213> Homo sapiens
<400> 355
Met Lys Arg Ser Phe Leu Leu Pro Leu Leu Leu Val Gly Phe Leu Asp
Thr Ala His Leu Ile Leu Leu Glu Thr Leu Ser Val Cys Leu Trp Leu
Pro Ser Leu Ile Asp Ser Arg Cys Val Met Ser
        35
<210> 356
<211> 78
<212> PRT
<213> Homo sapiens
<400> 356
Met Lys Glu Gly Pro Pro Cys Lys Arg His His Tyr Tyr Gln Asn Cys
Gly Ala Lys Leu Leu Val Ser Leu Phe Gly Glu Thr Asn Gln Ile His
Leu Leu Glu Thr Gln Val Gly Thr Glu Lys Gly Glu Arg Ile Trp
Glu Glu Lys Trp Arg Ile Ser Ser Thr Val Leu Phe Ile Ser Val Asn
Ser Tyr Val Glu Gly Ser Val Leu Glu Ile Lys Leu Phe Tyr
<210> 357
<211> 24
<212> PRT
<213> Homo sapiens
<400> 357
Met Ser Glu Ile Leu Ser Leu Leu Phe Cys Leu Leu Gly Pro Ala Leu
Asp Glu Arg Arg Glu Glu Lys Asp
<210> 358
<211> 274
```

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<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (178)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (229)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (274)
<223> Xaa equals stop translation
<400> 358
Met Ser Ser Ala Gly Thr Ala Thr Pro Leu Glu Met Asp His Lys Leu
Thr Ser Gln Pro Gly Arg Pro Ser Phe Tyr Cys Asn Ser Arg His Ser
Ile Val Gly Ser Ser His Gln Leu Gly Phe Trp Phe Ser His Leu Glu
                             40
Ser Ser Gly Leu Lys Val Phe Gln Val Ser Leu Pro Cys Glu Cys Val
Asn Leu Pro Thr Arg Ile Ala Ser Val Val Leu Ser Leu Met Ser Leu
Leu Val Val Gly Gln Ala Pro Ala Trp Glu Gly Ser Leu Leu Arg Gly
Arg Pro Ala Gly Gly Ala His Leu Cys Ala Met Xaa Val Ile Glu Gly
                                105
Leu Val Val Asp Val Gly Glu Arg Ile Leu His Gly Gln Arg Glu Val
        115
Gly Gln Val Ser Gln Val Leu Pro Ala Leu Ser Leu Gly Leu Val Phe
                        135
    130
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Leu Cys Gln Gly Thr Val Glu Lys Val Ser Gly Ala Ala His Cys Ser
                                        155
Ser Leu Leu Cys Cys Leu Pro Trp Gln Cys Ser Gly Gly Phe Pro
Thr Xaa Arg Cys Ser Arg Pro Tyr Phe Ser Ser His Lys Gly Val Ala
Ala Thr Leu Ala Leu Thr Cys His Cys Asp Lys Val His Val Ala Gly
Leu Gly Lys Asp Trp Ala Ile Glu Gln Arg Arg Arg Thr Cys Glu Ser
Asp Xaa Glu Xaa Xaa Pro Phe Thr Leu Ala Gly Leu Val Leu Val Leu
Arg Phe Cys Gln Val Val Leu Val Trp Ile Pro Gln Leu Gly Asp Lys
                245
His Trp Arg Gly Met Thr Arg Leu Gly Arg Val Ser Leu Thr Ser Ser
                                265
            260
Ile Xaa
<210> 359
<211> 47
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (47)
<223> Xaa equals stop translation
<400> 359
Met Ile Phe Thr Ser Val Thr Lys Gly Ile Leu Leu Ile Ala Leu Trp
                                     10
Val Pro Leu Phe His Phe Met Leu Ile Asp Ser Ile Leu Gly Pro Ser
                                 2.5
Arg Leu Leu Thr Asp Gly Val Pro Phe Asn Pro Trp His Val Xaa
                             40
<210> 360
<211> 117
<212> PRT
<213> Homo sapiens
<400> 360
Met Trp Leu Leu Ser Ala Ile Leu Trp Ala Ser Leu Trp Met Ala Arg
```

<220>

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Met Ala Ser Arg Ser Leu Ser Ala Ser Gly Arg Val Asp Leu Asn Trp
Ser Trp Ala Glu Ile Arg Pro Ser Ile Ser Ser Met Val Trp Thr Met
Asn Met Ser Trp Arg Ser Ser Met Ala Leu Ser Ile Gln Leu Leu Lys
Gly Ala Ala Arg Leu Ala Tyr Ser Arg Cys Ser Trp Ser Met Ala Ser
Ser Cys Phe Ser Val Phe Ser Arg Ala Ser Leu Arg Leu Cys Val Arg
Glu Pro Arg Ala Ser His Trp Ser Gln Ile Phe Trp His Arg Val Leu
Thr Leu Trp Glu Ser
       115
<210> 361
<211> 52
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 361
Met Ser Ile Ser Gly Thr Asp Gly Leu Ile Leu Leu Val Gly Leu
Glu Ala Xaa Val Arg Ser Ser Lys Lys Trp Ile Pro Lys Ala Leu Xaa
Val Thr Gln Ala Lys Trp Asn Ser Trp Pro Ser Arg Arg Asn Ala Gly
Phe Ala Leu His
     50
<210> 362
<211> 132
<212> PRT
<213> Homo sapiens
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```
<221> SITE
<222> (132)
<223> Xaa equals stop translation
<400> 362
Met Glu His Cys Leu Tyr His Ser Val His Gly Ile Asn Pro Tyr Ile
His Lys Asn Thr His Pro Ser Ile Asn Ile Tyr Met Val Trp Asp Glu
Gln Val Asn Ser Phe Glu Arg Glu Phe Val Pro Phe Phe Phe Leu Ile
Ile Leu Leu Asn Cys Cys Gln Leu Ser Asn Lys Gln Thr Glu Lys Leu
Phe Gly Lys Thr Leu His Thr Pro Phe Leu Ser Ser Ala Leu Lys Tyr
Arg Leu Asn Thr His Ile Leu Pro Val Phe Ser Tyr Ser Asp Ser Ile
Leu Thr Cys His Leu Ile Leu Ala Ser Tyr Phe Ser His Val Tyr Leu
            100
Pro Val Thr Cys Ile Cys Tyr Leu Asn Arg Lys Lys Asn Ile Gln Lys
                           120
Lys Lys Asn Xaa
   130
<210> 363
<211> 204
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (204)
<223> Xaa equals stop translation
<400> 363
Met Gly Ser Arg Asp His Leu Phe Lys Val Leu Val Val Gly Asp Ala
                                     10
Ala Val Gly Lys Thr Ser Leu Val Gln Asp Tyr Ser Gln Asp Ser Phe
Ser Lys His Tyr Lys Ser Thr Val Gly Val Asp Phe Ala Leu Lys Val
Leu Gln Trp Ser Asp Tyr Glu Ile Val Arg Leu Gln Leu Trp Asp Ile
```

Ala Gly Gln Glu Arg Phe Thr Ser Met Thr Arg Leu Tyr Tyr Arg Asp

75 -

```
Ala Ser Ala Cys Val Ile Met Phe Asp Val Thr Asn Ala Thr Thr Phe 85 90 95
```

Ser Asn Ser Gln Arg Trp Lys Gln Asp Leu Asp Ser Lys Leu Thr Leu 100 105 110

Pro Asn Gly Glu Pro Val Pro Cys Leu Leu Leu Ala Asn Lys Cys Asp 115 120 125

Leu Ser Pro Trp Ala Val Ser Arg Asp Gln Ile Asp Arg Phe Ser Lys
130 135 140

Glu Asn Gly Phe Thr Gly Trp Thr Glu Thr Ser Val Lys Glu Asn Lys 145 150 155 160

Asn Ile Asn Glu Ala Met Arg Val Leu Ile Glu Lys Met Met Arg Asn 165 170 175

Ser Thr Glu Asp Ile Met Ser Leu Ser Thr Gln Gly Asp Tyr Ile Asn 180 185 190

Leu Gln Thr Lys Ser Ser Ser Trp Ser Cys Cys Xaa 195 200

<210> 364

<211> 47

<212> PRT

<213> Homo sapiens

<400> 364

Met Ile Ser Leu Ile Phe Gln Leu Glu Glu Glu Lys Leu Val Glu Lys
1 5 10 15

Phe Phe Phe Leu Phe Phe Phe Leu Lys Lys Gly Ser Gln Gly Ser 20 25 30

Asn Leu Lys Ile Val Pro Arg His Met Arg Val Val Leu Arg Gly 35 40 45

<210> 365

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals stop translation

<400> 365

Met Thr Tyr Val Thr Cys Leu His Val Cys Leu Leu Val Glu Phe Leu 1 5 10 15

Asn Ser Gln Leu Thr Asn His Arg Lys Tyr Tyr Phe Leu Ser Tyr Gly 20 25 30

```
Phe Trp Phe Thr Gly Leu Arg Gly Phe Ser Glu Tyr Leu Trp Pro Gln 35 40 45
```

Gln His Thr Ser Phe His Pro Asn Arg Asn Glu Ile Asn Phe Val Ser 50 55 60

Thr Asp Asn Arg Ile Trp Val Thr Xaa 65 70

<210> 366

<211> 102

<212> PRT

<213 > Homo sapiens

<220>

<221> SITE

<222> (102)

<223> Xaa equals stop translation

<400> 366

Met Ser Asp Gln Glu Ala Lys Pro Ser Thr Glu Asp Leu Gly Asp Lys
1 5 10 15

Lys Glu Gly Glu Tyr Ile Lys Leu Lys Val Ile Gly Gln Asp Ser Ser 20 25 30

Glu Ile His Phe Lys Val Lys Met Thr Thr His Leu Lys Lys Leu Lys 35 40 45

Glu Ser Tyr Cys Gln Arg Gln Gly Val Pro Met Asn Ser Leu Arg Phe 50 55 60

Leu Phe Glu Gly Gln Arg Ile Ala Asp Asn His Thr Pro Lys Glu Leu 65 70 75 80

Gly Met Glu Glu Glu Asp Val Ile Glu Val Tyr Gln Glu Gln Thr Gly 85 90 95

Gly His Ser Thr Val Xaa

<210> 367

<211> 48

<212> PRT

<213> Homo sapiens

<400> 367

Met Gly Phe Pro Gln Trp His Leu Gly Asn His Ala Val Glu Pro Val
1 5 10 15

Thr Ser Ile Leu Leu Phe Leu Leu Met Met Leu Gly Val Arg Gly 20 25 30

Leu Leu Val Gly Leu Val Tyr Leu Val Ser His Leu Ser Gln Arg

```
<210> 368
<211> 179
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (179)
<223> Xaa equals stop translation
<400> 368
Met Ser Ala Glu Val Lys Val Thr Gly Gln Asn Gln Glu Gln Phe Leu
Leu Leu Ala Lys Ser Ala Lys Gly Ala Ala Leu Ala Thr Leu Ile His
Gln Val Leu Glu Ala Pro Gly Val Tyr Val Phe Gly Glu Leu Leu Asp
Met Pro Asn Val Arg Glu Leu Ala Glu Ser Asp Phe Ala Ser Thr Phe
Arg Leu Leu Thr Val Phe Ala Tyr Gly Thr Tyr Ala Asp Tyr Leu Ala
Glu Ala Arg Asn Leu Pro Pro Leu Thr Glu Ala Gln Lys Asn Lys Leu
Arg His Leu Ser Val Val Thr Leu Ala Ala Lys Val Lys Cys Ile Pro
            100
Tyr Ala Val Leu Leu Glu Ala Leu Ala Leu Arg Asn Val Arg Gln Leu .
                            120
Glu Asp Leu Val Ile Glu Ala Val Tyr Ala Asp Val Leu Arg Gly Ser
    130
Leu Asp Gln Arg Asn Gln Arg Leu Glu Val Asp Tyr Ser Ile Gly Arg
                    150
                                        155
Asp Ile Gln Arg Gln Asp Leu Ser Ala Ile Ala Arg Thr Leu Xaa Lys
                                    170
```

Asn His Xaa

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<210> 369
<211> 25
<212> PRT
<213> Homo sapiens
<400> 369
Met Lys Ser Ser Ser Leu Phe Phe Phe Phe Leu Ala His Phe Ile His
Ser His Asp Leu Pro Gly Leu Cys Arg
             20
<210> 370
<211> 224
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (224)
<223> Xaa equals stop translation
<400> 370
Met Lys Phe Ala Ala Ser Gly Xaa Phe Leu His His Met Ala Gly Leu
                                     10
Ser Ser Ser Lys Leu Ser Met Ser Lys Ala Leu Pro Leu Thr Lys Val
Val Gln Asn Asp Ala Tyr Thr Ala Pro Ala Leu Pro Ser Ser Ile Arg
                             40
Thr Lys Ala Leu Thr Asn Met Ser Arg Thr Leu Val Asn Lys Glu Glu
Pro Pro Lys Glu Leu Pro Ala Ala Glu Pro Val Leu Ser Pro Leu Glu
                                          75
Gly Thr Lys Met Thr Val Asn Asn Leu His Pro Arg Val Thr Glu Glu
Asp Ile Val Glu Leu Phe Cys Val Cys Gly Ala Leu Lys Arg Ala Arg
                                105
Leu Val His Pro Gly Val Ala Glu Val Val Phe Val Lys Lys Asp Asp
        115
```

Ala Ile Thr Ala Tyr Lys Lys Tyr Asn Asn Arg Cys Leu Asp Gly Gln 130 140

Pro Met Lys Cys Asn Leu His Met Asn Gly Asn Val Ile Thr Ser Asp 145 150 150

Gln Pro Ile Leu Leu Arg Leu Ser Asp Ser Pro Ser Met Lys Lys Glu 165 170 175

Ser Glu Leu Pro Arg Arg Val Asn Ser Ala Ser Ser Ser Asn Pro Pro 180 185 190

Ala Glu Val Asp Pro Asp Thr Ile Leu Lys Ala Leu Phe Lys Ser Ser 195 200 205

Gly Ala Ser Xaa Thr Thr Gln Pro Thr Glu Phe Lys Ile Lys Leu Xaa 210 215 220

<210> 371

<211> 349

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (349)

<223> Xaa equals stop translation

<400> 371

Met Ser Lys Asn Cys Ile Lys Leu Leu Cys Glu Asp Pro Val Phe Ala 1 5 10 15

Glu Tyr Ile Lys Cys Ile Leu Met Asp Glu Arg Thr Phe Leu Asn Asn 20 25 30

Asn Ile Val Tyr Thr Phe Met Thr His Phe Leu Leu Lys Val Gln Ser 35 40 45

Gln Val Phe Ser Glu Ala Asn Cys Ala Asn Leu Ile Ser Thr Leu Ile 50 55 60

Thr Asn Leu Ile Ser Gln Tyr Gln Asn Leu Gln Ser Asp Phe Ser Asn 65 70 75 80

Arg Val Glu Ile Ser Lys Ala Ser Ala Ser Leu Asn Gly Asp Leu Arg 85 90 95

Ala Leu Ala Leu Leu Ser Val His Thr Pro Lys Gln Leu Asn Pro $\,^{\circ}$ 100 $\,^{\circ}$ 110

Ala Leu Ile Pro Thr Leu Gln Glu Leu Leu Ser Lys Cys Arg Thr Cys 115 120 125

Leu Gln Gln Arg Asn Ser Leu Gln Glu Gln Glu Ala Lys Glu Arg Lys

		130					135					140				
	Thr 145	Lys	Asp	Asp	Glu	Gly 150	Ala	Thr	Pro	Ile	Lys 155	Arg	Arg	Arg	Val	Ser 160
	Ser	Asp	Glu	Glu	His 165	Thr	Val	Asp	Ser	Cys 170	Ile	Ser	Asp	Met	Lys 175	Thr
	Glu	Thr	Arg	Glu 180	Val	Leu	Thr	Pro	Thr 185	Ser	Thr	Ser	Asp	Asn 190	Glu	Thr
	Arg	Asp	Ser 195	Ser	Ile	Ile	Asp	Pro 200	Gly	Thr	Glu	Gln	Asp 205	Leu	Pro	Ser
	Pro	Glu 210	Asn	Ser	Ser	Val	Lys 215	Glu	Tyr	Arg	Met	Glu 220	Val	Pro	Ser	Ser
	Phe 225	Ser	Glu	Asp	Met	Ser 230	Asn	Ile	Arg	Ser	Gln 235	His	Ala	Glu	Glu	Gln 240
	Ser	Asn	Asn	Gly	Arg 245	Tyr	Asp	Asp	Cys	Lys 250	Glu	Phe	Lys	Asp	Leu 255	His
	Cys	Ser	Lys	Asp 260	Ser	Thr	Leu	Ala	Glu 265	Glu	Glu	Ser	Glu	Phe 270	Pro	Ser
	Thr	Ser	Ile 275	Ser	Ala	Val	Leu	Ser 280	Asp	Leu	Ala	Asp	Leu 285	Arg	Ser	Cys
	Asp	Gly 290	Gln	Ala	Leu	Pro	Ser 295	Gln	Asp	Pro	Glu	Val 300	Ala	Leu	Ser	Leu
	Ser 305	Cys	Gly	His	Ser	Arg 310	Gly	Leu	Phe	Ser	His 315	Met	Gln	Gln	His	Asp 320
	Ile	Leu	Asp	Thr	Leu 325	Cys	Arg	Thr	Ile	Glu 330	Ser	Thr	Ile	His	Val 335	Val
	Thr	Arg	Ile	Ser 340	Gly	Lys	Gly	Asn	Gln 345	Ala	Ala	Ser	Xaa			
<210> 372 <211> 467 <212> PRT <213> Homo sapiens <220> <221> SITE																
	<222	2> (1	158)	quals	s any	of of	the	natu	ırall	.y oc	curi	ing	L-an	nino	ació	ls
	<222	.> SI !> (2	79)	⁻ ⁻		e	4 1-						<u>.</u>			1
	<223		ia eç	quals	s any	/ OÏ	tne	natu	ırall	.у ос	curr	ing	L-an	nino	ació	ıs

<221> SITE

<222> (341)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 372

Met Leu His Gln Asp His Ile Thr Phe Ala Met Leu Leu Ala Arg Ile 1 5 10 15

Lys Leu Lys Gly Thr Val Gly Glu Pro Thr Tyr Asp Ala Glu Phe Gln
20 25 30

His Phe Leu Arg Gly Asn Glu Ile Val Leu Ser Ala Gly Ser Thr Pro 35 40 45

Arg Ile Gln Gly Leu Thr Val Glu Gln Ala Glu Ala Val Val Arg Leu . 50 60

Ser Cys Leu Pro Ala Phe Lys Asp Leu Ile Ala Lys Val Gln Ala Asp 65 70 75 80

Glu Gln Phe Gly Ile Trp Leu Asp Ser Ser Pro Glu Gln Thr Val 85 90 95

Pro Tyr Leu Trp Ser Glu Glu Thr Pro Ala Thr Pro Ile Gly Gln Ala 100 105 110

Ile His Arg Leu Leu Ile Gln Ala Phe Arg Pro Asp Arg Leu Leu 115 120 125

Ala Met Ala His Met Phe Val Ser Thr Asn Leu Gly Glu Ser Phe Met 130 135 140

Val Lys Pro Asn Thr Pro Val Leu Met Cys Ser Val Pro Gly Tyr Asp 165 170 175

Ala Ser Gly His Val Glu Asp Leu Ala Ala Glu Gln Asn Thr Gln Ile 180 185 190

Thr Ser Ile Ala Ile Gly Ser Ala Glu Gly Phe Asn Gln Ala Asp Lys
195 200 205

Ala Ile Asn Thr Ala Val Lys Ser Gly Arg Trp Val Met Leu Lys Asn 210 215 220

Val His Leu Ala Pro Gly Trp Leu Met Gln Leu Glu Lys Lys Leu His 225 230 235 240

Ser Leu Gln Pro His Ala Cys Phe Arg Leu Phe Leu Thr Met Glu Ile 245 250 255

Asn Pro Lys Val Pro Val Asn Leu Leu Arg Ala Gly Arg Ile Phe Val 260 265 270

Phe Glu Pro Pro Pro Gly Xaa Lys Ala Asn Met Leu Arg Thr Phe Ser 275 280 285

Ser Ile Pro Val Ser Arg Ile Cys Lys Ser Pro Asn Glu Arg Ala Arg Leu Tyr Phe Leu Leu Ala Trp Phe His Ala Ile Ile Gln Glu Arg Leu Arg Tyr Ala Pro Leu Gly Trp Ser Lys Lys Tyr Glu Phe Gly Glu Ser Asp Leu Arg Ser Xaa Cys Asp Thr Val Asp Thr Trp Leu Asp Asp Thr Ala Lys Gly Arg Gln Asn Ile Ser Pro Asp Lys Ile Pro Trp Ser Ala 360 Leu Lys Thr Leu Met Ala Gln Ser Ile Tyr Gly Gly Arg Val Asp Asn 375 Glu Phe Asp Gln Arg Leu Leu Asn Thr Phe Leu Glu Arg Leu Phe Thr 390 395 Thr Arg Ser Phe Asp Ser Glu Phe Lys Leu Ala Cys Lys Val Asp Gly 405 410 His Lys Asp Ile Gln Met Pro Asp Gly Met Gln Ala Arg Gly Val Cys 420 425 Ala Val Gly Gly Val Ala Pro Arg His Pro Asp Ala Leu Leu Ala Gly 440 Pro Ala Gln Gln Arg Arg Glu Ser Pro Pro Tyr His Thr Gly Cys Gly 455 His Asp Gln 465 <210> 373 <211> 152 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (146) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (152) <223> Xaa equals stop translation <400> 373 Met Ala Asp Glu Ala Thr Arg Arg Val Val Ser Glu Ile Pro Val Leu

Lys Thr Asn Ala Gly Pro Arg Asp Arg Glu Leu Trp Val Gln Arg Leu

	20			25					30		
Lys Glu Glu 35	Tyr Gln	Ser Leu	Ile 40	Arg	Tyr	Val	Glu	Asn 45	Asn	Lys	Asn
Ala Asp Asn . 50	Asp Trp	Phe Arg		Glu	Ser	Asn	Lys 60	Glu	Gly	Thr	Arg
Trp Phe Gly	Lys Cys	Trp Tyr	: Ile	His	Asp	Leu 75	Leu	Lys	Tyr	Glu	Phe 80
Asp Ile Glu	Phe Asp 85	Ile Pro	Ile	Thr	Tyr 90	Pro	Thr	Thr	Ala	Pro 95	Glu
Ile Ala Val	Pro Glu 100	Leu Asp	Gly	Lys 105	Thr	Ala	Lys	Met	Tyr 110	Arg	Gly
Gly Lys Ile	Cys Leu	Thr Asp	His 120	Phe	Lys	Pro	Leu	Trp 125	Gly	Gln	Glu
Cys Ala Gln 130	Ile Trp	Thr Ser		Ser	His	Gly	Ser 140	Gly	Ala	Gly	Ser
Met Xaa Gly 145	Ser Gly	Asn Pro) Xaa								
<210> 374 <211> 373 <212> PRT <213> Homo sapiens											-
<220> <221> SITE <222> (175) <223> Xaa eq	uals any	of the	: natı	urall	Ly oc	ccuri	ring	L-an	nino	acid	is
<220> <221> SITE <222> (373) <223> Kaa eq	uals sto	op trans	latio	on							
<400> 374 Met Tyr Asp	Gly Thr	Lys Glu	. Val	Pro	Met 10	Asn	Pro	Val	Lys	Ile 15	Tyr
Gln Val Cys	Asp Ile 20	Pro Gln	. Pro	Gln 25	Gly	Ser	Ile	Ile	Asn 30	Pro	Gly
Ser Thr Gly	Ser Ala	Pro Trp	Asp 40	Glu	Lys	Asp	Asn	Asp 45	Val	Asp	Glu
Glu Asp Glu (Glu Asp	Glu Leu 55	_	Gln	Ser	Gln	His 60	His	Val	Pro	Ile
Gln Asp Thr	Phe Pro	Phe Leu 70	Asn	Ile	Asn	Gly 75	Ser	Pro	Met	Ala	Pro 80

Ala Ser Val Gly Asn Cys Ser Val Gly Asn Cys Ser Pro Glu Ala Val 85 90 95

Trp Pro Lys Thr Glu Pro Leu Glu Met Glu Val Pro Gln Ala Pro Ile 100 105 110

Gln Pro Phe Tyr Ser Ser Pro Glu Leu Trp Ile Ser Ser Leu Pro Met 115 120 125

Thr Asp Leu Asp Ile Lys Phe Gln Tyr Arg Gly Lys Glu Tyr Gly Gln 130 140

Thr Met Thr Val Ser Asn Pro Gln Gly Cys Arg Leu Phe Tyr Gly Asp 145 150 155 160

Leu Gly Pro Met Pro Asp Gln Glu Glu Leu Phe Gly Pro Val Xaa Leu 165 170 175

Glu Gln Val Lys Phe Pro Gly Pro Glu His Ile Thr Asn Glu Lys Gln 180 185 190

Lys Leu Phe Thr Ser Lys Leu Leu Asp Val Met Asp Arg Gly Leu Ile 195 200 205

Leu Glu Val Ser Gly His Ala Ile Tyr Ala Ile Arg Leu Cys Gln Cys 210 215 220

Lys Val Tyr Trp Ser Gly Pro Cys Ala Pro Ser Leu Val Ala Pro Asn 225 230 235 240

Leu Ile Glu Arg Gln Lys Lys Val Lys Leu Phe Cys Leu Glu Thr Phe 245 250 255

Leu Ser Asp Leu Ile Ala His Gln Lys Gly Gln Ile Glu Lys Gln Pro 260 . 265 270

Pro Phe Glu Ile Tyr Leu Cys Phe Gly Glu Glu Trp Pro Asp Gly Lys 275 280 285

Pro Leu Glu Arg Lys Leu Ile Leu Val Gln Val Ile Pro Val Val Ala 290 295 300

Arg Met Ile Tyr Glu Met Phe Ser Gly Asp Phe Thr Arg Ser Phe Asp 305 310 315 320

Ser Gly Ser Val Arg Leu Gln Ile Ser Thr Pro Asp Ile Lys Asp Asn 325 330 335

Ile Val Ala Gln Leu Lys Gln Leu Tyr Arg Ile Leu Gln Thr Gln Glu 340 345 350

Ser Trp Gln Pro Met Gln Pro Thr Pro Ser Met Gln Leu Pro Pro Ala 355 360 365

Leu Pro Pro Gln Xaa 370

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<210> 375
<211> 83
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (83)
<223> Xaa equals stop translation
<400> 375
Met Gly Ser Ser Val Leu Pro Phe Cys Val Cys Val Thr Ser Pro Ser
Leu Gly Gly Arg Cys Ile Gln Gly Arg Phe Ala Ser His Ser Lys Phe
Trp Gly Phe Gly Arg Lys Thr Ala Ser Phe Gly Ala Val Gly Glu Thr
Pro Pro Asp Gln Glu Pro Gln Lys Glu Thr Glu Pro Ala Thr Ser Ser
                         55
His Ala Arg Pro Trp Ala Arg Val Ile Gly Leu Arg Ile Trp Pro Gln
Pro Asn Xaa
<210> 376
<211> 97
<212> PRT
<213> Homo sapiens
<400> 376
Met Thr Lys Lys Arg Glu Asn Leu Gly Val Ala Leu Glu Ile Asp
Gly Leu Glu Glu Lys Leu Ser Gln Cys Arg Arg Asp Leu Glu Ala Val
             20
Asn Ser Arg Leu His Ser Arg Glu Leu Ser Pro Glu Ala Arg Arg Ser
                             40
Leu Glu Lys Glu Lys Asn Ser Leu Met Asn Lys Ala Ser Asn Tyr Glu
Lys Glu Leu Lys Phe Leu Arg Gln Glu Asn Arg Lys Asn Met Leu Leu
Ser Val Ala Ile Phe Ile Leu Leu Thr Leu Val Tyr Ala Tyr Trp Thr
```

Met

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<210> 377
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<212> PRT

<213> Homo sapiens

<400> 377

Met Gly Ala Ser Ala Arg Leu Leu Arg Ala Val Ile Met Gly Ala Pro 1 5 10 15

Gly Ser Gly Lys Gly Thr Val Ser Ser Arg Ile Thr Thr His Phe Glu 20 25 30

Leu Lys His Leu Ser Ser Gly Asp Leu Leu Arg Asp Asn Met Leu Arg 35 40 45

Gly Thr Glu Ile Gly Val Leu Ala Lys Ala Phe Ile Asp Gln Gly Lys 50 55 60

Leu Ile Pro Asp Asp Val Met Thr Arg Leu Ala Leu His Glu Leu Lys
65 70 75 80

Asn Leu Thr Gln Tyr Ser Trp Leu Leu Asp Gly Phe Pro Arg Thr Leu
85 90 95

Pro Gln Ala Glu Ala Leu Asp Arg Ala Tyr Gln Ile Asp Thr Val Ile
100 105 110

Asn Leu Asn Val Pro Phe Glu Val Ile Lys-Gln Arg Leu Thr Ala Arg 115 120 125

Trp Ile His Pro Ala Ser Gly Arg Val Tyr Asn Ile Glu Phe Asn Pro 130 135 140

Pro Lys Thr Val Gly Ile Asp Asp Leu Thr Gly Glu Pro Leu Ile Gln 145 150 155 160

Arg Glu Asp Asp Lys Pro Glu Thr Val Ile Lys Arg Leu Lys Ala Tyr 165 170 175

Glu Asp Gln Thr Lys Pro Val Leu Glu Tyr Tyr Gln Lys Lys Gly Val 180 185 190

Leu Glu Thr Phe Ser Gly Thr Glu Thr Asn Lys Ile Trp Pro Tyr Val

Tyr Ala Phe Leu Gln Thr Lys Val Pro Gln Arg Ser Gln Lys Ala Ser 210 215 220

Val Thr Pro 225

<210> 378

<211> 79

<212> PRT

<213> Homo sapiens

<220>

<211> 227

```
<221> SITE
<222> (79)
<223> Xaa equals stop translation
<400> 378
Met Phe Leu Asn Cys Glu Ile Leu Glu Tyr Cys Tyr Tyr Leu Thr Gln
Leu Lys Ile Ser Met Gly Lys Tyr Leu Ser Ile Pro Thr Val Leu Leu
Lys Ile Ile Arg Cys Ser Ile Thr Ala Val Ser Asp Ser Ser Thr Ser
Trp Ala Ile Lys Ala Gln Leu Lys Ile Glu Asn Lys Asp Leu Asp Asn
                         55
Lys Thr Ala Lys Gly Gly Gly Glu Ala Leu Thr Cys Thr Xaa
<210> 379
<211> 51
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 379
Met Arg Ala Val Phe Pro Cys Cys Pro Phe Leu Thr Leu Met Leu Pro
Leu Leu Glu Cys Leu Val Gly Met Ile Met Cys Tyr Leu Gly Ile Ser
Phe Thr Asp Thr Arg Lys Thr Ala Gly Leu Lys Lys Lys Lys Lys
Lys Xaa Xaa
    50
<210> 380
<211> 61
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (61)
```

```
<223> Xaa equals stop translation
 <400> 380
 Met Phe Leu Met Arg Met His Leu Cys Phe Cys Lys Tyr Cys Cys Ser
 Phe Ile Val Thr Pro Thr Ser Thr Ser Asn Thr Ala Ser Tyr Leu Trp
 Pro Trp Ile Ser Ala Ser Met Ala Gly Arg Gly Ser Ser Trp Ala Cys
 Thr Leu Asn Ala Val Thr Arg Glu Gly Leu Pro Glu Xaa
 <210> 381
 <211> 40
 <212> PRT
 <213 > Homo sapiens
 <220>
 <221> SITE
 <222> (40)
 <223> Xaa equals stop translation
 <400> 381
 Met Ser Leu Leu Asn Thr His Thr Leu Cys Phe Val Leu Phe Cys Phe
                   5
                                      10
 Thr Leu Ser Ile Asn Gln Glu Lys Leu Ala Asn His Leu Ala Phe Arg
 Ile Leu Phe Phe Ile Val Phe Xaa
          35
 <210> 382
 <211> 44
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (44)
 <223> Xaa equals stop translation
 <400> 382
 Met Cys Ser Gly Gln Ser Gln Val Trp Lys Met Ala Leu Gln Ala Leu
 Asp Ser Glu Thr Val Val Ile Leu Pro Asp Met His Leu Ile Leu Ser
                                 25
 Leu Arg Leu Ile His Asn Ala Arg Pro Cys Leu Xaa
```

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<210> 383
<211> 203
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (203)
<223> Xaa equals stop translation
Met Leu Ile Ser Glu Glu Glu Ile Pro Phe Lys Asp Asp Pro Arg Asp
Glu Thr Tyr Lys Pro His Leu Glu Arg Glu Thr Pro Lys Pro Arg Arg
Lys Ser Gly Lys Val Lys Glu Lys Glu Lys Glu Ile Lys Val
Glu Val Glu Val Glu Val Lys Glu Glu Glu Asn Glu Ile Arg Glu Asp
Glu Glu Pro Pro Arg Lys Arg Gly Arg Arg Arg Lys Asp Asp Lys Ser
Pro Arg Leu Pro Lys Arg Arg Lys Lys Pro Pro Ile Gln Tyr Val Arg
Cys Glu Met Glu Gly Cys Gly Thr Val Leu Ala His Pro Arg Tyr Leu
Gln His His Ile Lys Tyr Gln His Leu Leu Lys Lys Lys Tyr Val Cys
                            120
Pro His Pro Ser Cys Gly Arg Leu Phe Arg Leu Gln Lys Gln Leu Leu
Arg His Ala Lys His His Thr Asp Gln Arg Asp Tyr Ile Cys Glu Tyr
                   150
Cys Ala Arg Ala Phe Lys Ser Ser His Asn Leu Ala Val His Arg Met
Ile His Thr Gly Glu Lys His Tyr Asn Val Arg Ser Val Asp Leu Leu
Val Asp Lys Arg His Leu Leu Ile Gly Thr Xaa
                            200
```

<210> 384

<211> 29

<212> PRT

<213> Homo sapiens

<400> 384 .

Met Leu Pro Arg Arg Thr Phe Tyr Phe Tyr Phe Ile Phe Ile Phe Phe

```
5
                                                         15
Leu Ala Ser Phe Trp Gly Phe Thr Leu Arg Ala Ser Phe
<210> 385
<211> 136
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (136)
<223> Xaa equals stop translation
<400> 385
Met Phe Asp Ser Leu Ser Tyr Phe Lys Gly Ser Ser Leu Leu Met
Leu Lys Thr Tyr Leu Ser Glu Asp Val Phe Gln His Ala Val Val Leu
                                 25
Tyr Leu His Asn His Ser Tyr Ala Ser Ile Gln Ser Asp Asp Leu Trp
                             40
Asp Ser Phe Asn Glu Val Thr Asn Gln Thr Leu Asp Val Lys Arg Met
                         55
Met Lys Thr Trp Thr Leu Gln Lys Gly Phe Pro Leu Val Thr Val Gln
                     70
Lys Lys Gly Lys Glu Leu Phe Ile Gln Gln Glu Arg Phe Phe Leu Asn
Met Lys Pro Glu Ile Gln Pro Ser Asp Thr Arg Tyr Met Pro Ser Phe
Phe Ser Cys His Leu Phe Cys Thr Leu Arg Trp Lys Tyr Phe Glu Val
Phe Tyr Asn His Lys Phe Leu Xaa
    130
<210> 386
<211> 41
<212> PRT
<213> Homo sapiens
<400> 386
Met Ala Trp Arg Arg Glu Pro Ala Ser Gly Leu Ala Ala Cys Trp
Leu Trp Arg Cys Ser Pro Trp Pro Cys Ala Cys Pro Gly Pro Gly Ala
```

Gly Leu Ser Ser Gly Ser Arg Pro Trp

```
<210> 387
  <211> 468
  <212> PRT
  <213> Homo sapiens
  <220>
  <221> SITE
  <222> (468)
  <223> Xaa equals stop translation
  <400> 387
  Met Glu Phe Leu Lys Val Ala Arg Arg Asn Lys Arg Glu Gln Leu Glu
  Gln Ile Gln Lys Glu Leu Ser Val Leu Glu Glu Asp Ile Lys Arg Val
  Glu Glu Met Ser Gly Leu Tyr Ser Pro Val Ser Glu Asp Ser Thr Val
  Pro Gln Phe Glu Ala Pro Ser Pro Ser His Ser Ser Ile Ile Asp Ser
  Thr Glu Tyr Ser Gln Pro Pro Gly Phe Ser Gly Ser Ser Gln Thr Lys
  Lys Gln Pro Trp Tyr Asn Ser Thr Leu Ala Ser Arg Arg Lys Arg Leu
  Thr Ala His Phe Glu Asp Leu Glu Gln Cys Tyr Phe Ser Thr Arg Met
                                  105
  Ser Arg Ile Ser Asp Asp Ser Arg Thr Ala Ser Gln Leu Asp Glu Phe
  Gln Glu Cys Leu Ser Lys Phe Thr Arg Tyr Asn Ser Val Arg Pro Leu
                          135
  Ala Thr Leu Ser Tyr Ala Ser Asp Leu Tyr Asn Gly Ser Ser Ile Val
  145
  Ser Ser Ile Glu Phe Asp Arg Asp Cys Asp Tyr Phe Ala Ile Ala Gly
  Val Thr Lys Lys Ile Lys Val Tyr Glu Tyr Asp Thr Val Ile Gln Asp
  Ala Val Asp Ile His Tyr Pro Glu Asn Glu Met Thr Cys Asn Ser Lys
                              200
  Ile Ser Cys Ile Ser Trp Ser Ser Tyr His Lys Asn Leu Leu Ala Ser
  Ser Asp Tyr Glu Gly Thr Val Ile Leu Trp Asp Gly Phe Thr Gly Gln
```

Arg Ser Lys Val Tyr Gln Glu His Glu Lys Arg Cys Trp Ser Val Asp

Phe Asn Leu Met Asp Pro Lys Leu Leu Ala Ser Gly Ser Asp Asp Ala

Lys Val Lys Leu Trp Ser Thr Asn Leu Asp Asn Ser Val Ala Ser Ile

Glu Ala Lys Ala Asn Val Cys Cys Val Lys Phe Ser Pro Ser Ser Arg

Tyr His Leu Ala Phe Gly Cys Ala Asp His Cys Val His Tyr Tyr Asp 310

Leu Arg Asn Thr Lys Gln Pro Ile Met Val Phe Lys Gly His Arg Lys 330

Ala Val Ser Tyr Ala Lys Phe Val Ser Gly Glu Glu Ile Val Ser Ala 340 345

Ser Thr Asp Ser Gln Leu Lys Leu Trp Asn Val Gly Lys Pro Tyr Cys 360

Leu Arg Ser Phe Lys Gly His Ile Asn Glu Lys Asn Phe Val Gly Leu

Ala Ser Asn Gly Asp Tyr Ile Ala Cys Gly Ser Glu Asn Asn Ser Leu 395

Tyr Leu Tyr Tyr Lys Gly Leu Ser Lys Thr Leu Leu Thr Phe Lys Phe 410

Asp Thr Val Lys Ser Val Leu Asp Lys Asp Arg Lys Glu Asp Asp Thr 425

Asn Glu Phe Val Ser Ala Val Cys Trp Arg Ala Leu Pro Asp Gly Glu 435

Ser Asn Val Leu Ile Ala Ala Asn Ser Gln Gly Thr Ile Lys Val Leu 455

Glu Leu Val Xaa 465

<210> 388

<211> 29

<212> PRT

<213> Homo sapiens

<400> 388

Met Arg Lys Glu Asp Gly Phe Trp Phe Phe Phe Leu Phe Phe Phe

Val Val Gly Ser Lys Phe Val Asn Gly Asn Lys Leu Val 20

25

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<210> 389
<211> 29
<212> PRT
<213> Homo sapiens
<400> 389
Met Pro Leu Ala Pro Tyr Cys Asp Leu Leu Val Ala Leu Ser Phe Ala
Leu Val Leu Glu Ser Pro Val Asp Ser Ser Asp Phe Thr
<210> 390
<211> 138
<212> PRT
<213> Homo sapiens
<400> 390
Met Asn Ser Leu Val Ser Trp Gln Leu Leu Leu Phe Leu Cys Ala Thr
His Phe Gly Glu Pro Leu Glu Lys Val Ala Ser Val Gly Asn Ser Arg
Pro Thr Gly Gln Gln Leu Glu Ser Leu Gly Leu Leu Ala Pro Gly Glu
Gln Ser Leu Pro Cys Thr Glu Arg Lys Pro Ala Ala Thr Ala Arg Leu
                         55
Ser Arg Arg Gly Thr Ser Leu Ser Pro Pro Pro Glu Ser Ser Gly Ser
                    70
Pro Gln Gln Pro Gly Leu Ser Ala Pro His Ser Arg Gln Ile Pro Ala
Pro Gln Gly Ala Val Leu Val Gln Arg Glu Lys Asp Leu Pro Asn Tyr
            100
Asn Trp Asn Ser Phe Gly Leu Arg Phe Gly Lys Arg Glu Ala Ala Pro
Gly Asn His Gly Arg Ser Ala Gly Arg Gly
    130
<210> 391
<211> 74
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 391
Met Ser Cys Phe Ile Asp Ser Xaa Asp Ser Lys Ile Leu His Leu Leu
                                     10
Val Val Ser Phe Ile Cys Xaa Leu Phe Leu Leu Ile Leu Thr His Gly
                                 25
Ile Leu Ile Leu Arg Xaa Phe Phe Ser Val Xaa Xaa His Ser Leu Lys
Asn Asn Leu Glu Glu Tyr Leu Ile Leu Met Asn Lys Ala Leu Leu Thr
Arg Glu Asp Phe Phe Val Leu Pro Xaa Ala
 65
<210> 392
<211> 521
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (521)
<223> Xaa equals stop translation
<400> 392
Met Ser Ala Gly Glu Val Glu Arg Leu Val Ser Glu Leu Ser Gly Gly
                                     10
Thr Gly Gly Asp Glu Glu Glu Trp Leu Tyr Gly Asp Glu Asn Glu
```

Val	Glu	Arg 35	Pro	Glu	Glu	Glu	Asn 40	Ala	Ser	Ala	Asn	Pro 45	Pro	Ser	Gly
Ile	Glu 50	Asp	Glu	Thr	Ala	Glu 55	Asn	Gly	Val	Pro	Lys 60	Pro	Lys	Val	Thr
Glu 65	Thr	Glu	Asp	Asp	Ser 70	Asp	Ser	Asp	Ser	Asp 75	Asp	Asp	Glu	Asp	Asp 80
Val	His	Val	Thr	Ile 85	Gly	Asp	Ile	Lys	Thr 90	Gly	Ala	Pro	Gln	Tyr 95	Gly
Ser	Tyr	Gly	Thr 100	Ala	Pro	Val	Asn	Leu 105	Asn	Ile	Lys	Thr	Gly 110	Gly	Arg
Val	Tyr	Gly 115	Thr	Thr	Gly	Thr	Lys 120	Val	ГЛа	Gly	Val	Asp 125	Leu	Asp	Ala
Pro	Gly 130	Ser	Ile	Asn	Gly	Val 135	Pro	Leu	Leu	Glu	Val 140	Asp	Leu	Asp	Ser
Phe 145	Glu	Asp	Lys	Pro	Trp 150	Arg	Lys	Pro	Gly	Ala 155	Asp	Leu	Ser	Asp	Tyr 160
Phe	Asn	Tyr	Gly	Phe 165	Asn	Glu	Asp	Thr	Trp 170	Lys	Ala	Tyr	Cys	Glu 175	Lys
Gln	Lys	Arg	Ile 180	Arg	Met	Gly	Leu	Glu 185	Val	Ile	Pro	Val	Thr 190	Ser	Thr
Thr	Asn	Lys 195	Ile	Thr	Val	Gln	Gln 200	Gly	Arg	Thr	Gly	Asn 205	Ser	Glu	Lys
Glu	Thr 210	Ala	Leu	Pro	Ser	Thr 215	Lys	Ala	Glu	Phe	Thr 220	Ser	Pro	Pro	Ser
Leu 225	Phe	Lys	Thr	Gly	Leu 230	Pro	Pro	Ser	Arg	Arg 235	Leu	Pro	Gly	Ala	Ile 240
Asp	Val	Ile	Gly	Gln 245	Thr	Ile	Thr	Ile	Ser 250	Arg	Val	Glu	Gly	Arg 255	Arg
Arg	Ala	Asn	Glu 260	Asn	Ser	Asn	Ile	Gln 265	Val	Leu	Ser	Glu	Arg 270	Ser	Ala
Thr	Glu	Val 275	Asp	Asn	Asn	Phe	Ser 280	Lys	Pro	Pro	Pro	Phe 285	Phe	Pro	Pro
Gly	Ala 290	Pro	Pro	Thr	His	Leu 295	Pro	Pro	Pro	Pro	Phe 300	Leu	Pro	Pro	Pro
Pro 305	Thr	Val	Ser	Thr	Ala 310	Pro	Pro	Leu	Ile	Pro 315	Pro	Pro	Gly	Phe	Pro 3'20
Pro	Pro	Pro	Gly	Ala 325	Pro	Pro	Pro	Ser	Leu 330	Ile	Pro	Thr	Ile	Glu 335	Ser

Gly His Ser Ser Gly Tyr Asp Ser Arg Ser Ala Arg Ala Phe Pro Tyr 340 345 350

Gly Asn Val Ala Phe Pro His Leu Pro Gly Ser Ala Pro Ser Trp Pro 355 360 365

Ser Leu Val Asp Thr Ser Lys Gln Trp Asp Tyr Tyr Ala Arg Arg Glu 370 375 380

Lys Asp Arg Asp Arg Glu Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp 395 400

Arg Asp Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Asp
405
410
415

His Ser Pro Thr Pro Ser Val Phe Asn Ser Asp Glu Glu Arg Tyr Arg 420 425 430

Tyr Arg Glu Tyr Ala Glu Arg Gly Tyr Glu Arg His Arg Ala Ser Arg 435 440 445

Glu Lys Glu Glu Arg His Arg Glu Arg Arg His Arg Glu Lys Glu Glu 450 460

Thr Arg His Lys Ser Ser Arg Ser Asn Ser Arg Arg Arg His Glu Ser 465 470 475 480

Glu Glu Gly Asp Ser His Arg Arg His Lys His Lys Lys Ser Lys Arg 485 490 495

Ser Lys Glu Gly Lys Glu Ala Gly Ser Glu Pro Ala Pro Glu Gln Glu
505 510

Ser Thr Glu Ala Thr Pro Ala Glu Xaa 515 520

<210> 393

<211> 137

<212> PRT

<213 > Homo sapiens

<400> 393

Met Asn Ser Arg Gly Ile Trp Leu Ala Tyr Ile Ile Leu Val Gly Leu 1 5 10 15

Leu His Met Val Leu Leu Ser Ile Pro Phe Phe Ser Ile Pro Val Val 20 25 30

Trp Thr Leu Thr Asn Val Ile His Asn Leu Ala Thr Tyr Val Phe Leu 35 40 45

His Thr Val Lys Gly Thr Pro Phe Glu Thr Pro Asp Gln Gly Lys Ala
50 60

Arg Leu Leu Thr His Trp Glu Gln Met Asp Tyr Gly Leu Gln Phe Thr
65 70 75 80

Ser Ser Arg Lys Phe Leu Ser Ile Ser Pro Ile Val Leu Tyr Leu Leu 85 90 95

Ala Ser Phe Tyr Thr Lys Tyr Asp Ala Ala His Phe Leu Ile Asn Thr 100 105 110

Ala Ser Leu Leu Ser Val Leu Leu Pro Lys Leu Pro Gln Phe His Gly
115 120 125

Val Arg Val Phe Gly Ile Asn Lys Tyr 130 135

<210> 394

<211> 186

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (186)

<223> Xaa equals stop translation

<400> 394

Met Ala Ala Gln Lys Asp Gln Gln Lys Asp Ala Glu Ala Glu Gly Leu 1 5 10 15

Ser Gly Thr Thr Leu Leu Pro Lys Leu Ile Pro Ser Gly Ala Gly Arg 20 25 30

Glu Trp Leu Glu Arg Arg Arg Ala Thr Ile Arg Pro Trp Ser Thr Phe 35 40 45

Val Asp Gln Gln Arg Phe Ser Arg Pro Arg Asn Leu Gly Glu Leu Cys 50 55 60

Gln Arg Leu Val Arg Asn Val Glu Tyr Tyr Gln Ser Asn Tyr Val Phe
65 70 75 80

Val Phe Leu Gly Leu Ile Leu Tyr Cys Val Val Thr Ser Pro Met Leu 85 90 95

Leu Val Ala Leu Ala Val Phe Phe Gly Ala Cys Tyr Ile Leu Tyr Leu 100 105 110

Arg Thr Leu Glu Ser Lys Leu Val Leu Phe Gly Arg Glu Val Ser Pro 115 120 125

Ala His Gln Tyr Ala Leu Ala Gly Gly Ile Ser Phe Pro Phe Pro 130 135 140

Leu Ala Gly Ala Gly Ser Ala Val Phe Trp Val Leu Gly Ala Thr Leu 145 150 155 160

Val Val Ile Gly Ser His Ala Ala Phe His Gln Ile Glu Ala Val Asp 165 170 175

```
Gly Glu Glu Leu Gln Met Glu Pro Val Xaa
<210> 395
<211> 1
<212> PRT
<213> Homo sapiens
<400> 395
Met
 1
<210> 396
<211> 299
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (299)
<223> Xaa equals stop translation
<400> 396
Met Leu Ser Ile Phe Tyr Phe Ala Ile Pro Val Gly Ser Gly Leu Gly
Tyr Ile Ala Gly Ser Lys Val Lys Asp Met Ala Gly Asp Trp His Trp
Ala Leu Arg Val Thr Pro Gly Leu Gly Val Val Ala Val Leu Leu Leu
Phe Leu Val Val Arg Glu Pro Pro Arg Gly Ala Val Glu Arg His Ser
Asp Leu Pro Pro Leu Asn Pro Thr Ser Trp Trp Ala Asp Leu Arg Ala
Leu Ala Arg Asn Pro Ser Phe Val Leu Ser Ser Leu Gly Phe Thr Ala
Val Ala Phe Val Thr Gly Ser Leu Ala Leu Trp Ala Pro Ala Phe Leu
            100
Leu Arg Ser Arg Val Val Leu Gly Glu Thr Pro Pro Cys Leu Pro Gly
                            120
Asp Ser Cys Ser Ser Ser Asp Ser Leu Ile Phe Gly Leu Ile Thr Cys
    130
Leu Thr Gly Val Leu Gly Val Gly Leu Gly Val Glu Ile Ser Arg Arg
                    150
Leu Arg His Ser Asn Pro Arg Ala Asp Pro Leu Val Cys Ala Thr Gly
```

165

```
Leu Leu Gly Ser Ala Pro Phe Leu Phe Leu Ser Leu Ala Cys Ala Arg
180 185 190
```

Gly Ser Ile Val Ala Thr Tyr Ile Phe Ile Phe Ile Gly Glu Thr Leu 195 200 205

Leu Ser Met Asn Trp Ala Ile Val Ala Asp Ile Leu Leu Tyr Val Val 210 215 220

Ile Pro Thr Arg Arg Ser Thr Ala Glu Ala Phe Gln Ile Val Leu Ser 225 230 235 240

His Leu Leu Gly Asp Ala Gly Ser Pro Tyr Leu Ile Gly Leu Ile Ser 245 250 255

Asp Arg Leu Arg Arg Asn Trp Pro Pro Ser Phe Leu Ser Glu Phe Arg 260 265 270

Ala Leu Gln Phe Ser Leu Met Leu Cys Ala Phe Val Gly Ala Leu Gly 275 280 285

Gly Ala Leu Pro Gly His Arg His Leu His Xaa 290 295

<210> 397

<211> 49

<212> PRT

<213> Homo sapiens

<400> 397

Met Gly Pro Gln Gly Trp Val Arg Pro Leu Lys Thr Ala Pro Lys Leu 1 5 10 15

Gly Glu Ala Ile Arg Leu Ile Leu Phe Leu Asn Phe Val Lys Gln Cys
20 25 30

Ile Ala Ser Val Asn Leu Cys Ile Leu Arg Leu Asn Ile Thr Pro Leu 35 40 45

Leu

<210> 398

<211> 61

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals stop translation

<400> 398

Met Tyr Val Asn Tyr Gly Thr Arg Asn Tyr Ser Thr Glu Gly Pro Ala $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

```
Ala Leu Leu Asp Gln Ala Lys Leu Ser Leu Leu Val Trp Val Leu Cys
20 25 30
```

Phe Val Leu Leu Phe Val Cys Phe Cys Gly Leu Ser Tyr Val Val Ile 35 40 45

Ala Gln Val Pro Val Gly Leu Leu Cys Ile Thr Glu Xaa 50 55 60

<210> 399

<211> 79

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 399

Met Leu Trp Phe Ala Asn Phe Phe Thr Tyr Leu Phe Leu Ser Gln Ser

1 10 15

Val Ala Phe Val His Ile Ser His Ile Gly Val Arg Gln Val Asn Thr 20 25 30

Asn Cys Tyr Phe Ser Arg Lys Ser Tyr Cys Tyr Gly Ile Leu Asn Pro \$35\$

Ile Asn Cys Ile Lys Gly Lys Lys Lys Lys Lys Lys Lys Lys Lys 50 55

Lys Lys Lys Ile Pro Ala Gly Arg Xaa Leu Phe Pro Phe Gly 65 70 75

<210> 400

<211> 36

<212> PRT

<213> Homo sapiens

<400> 400

Met Pro Gly Ala Phe Ser Glu Thr Val Ile Asn Asp Leu Leu Ser Leu 1 5 10 15

Phe Leu Val Leu Pro Ala Glu Leu Ser Tyr Ser Thr Leu Ser Gly Val 20 25 30

Tyr Arg Asn Ala

<210> 401

<211> 180

<212> PRT

<213 > Homo sapiens

```
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (180)
<223> Xaa equals stop translation
<400> 401
Met Ala Gln Ser Arg Asp Gly Gly Asn Pro Phe Ala Glu Pro Ser Glu
Leu Asp Asn Pro Phe Gln Asp Pro Ala Val Ile Gln His Arg Pro Ser
Arg Gln Tyr Ala Thr Leu Asp Val Tyr Asn Pro Phe Glu Thr Arg Glu
                             40
Pro Pro Pro Ala Tyr Glu Pro Pro Ala Pro Ala Pro Leu Pro Pro
Ser Ala Pro Ser Leu Gln Pro Ser Arg Lys Leu Ser Pro Thr Glu Pro
Lys Asn Tyr Gly Ser Tyr Ser Thr Gln Ala Ser Ala Ala Ala Thr
Ala Glu Leu Leu Lys Lys Gln Glu Glu Leu Asn Arg Lys Ala Glu Glu
                                105
Leu Asp Arg Arg Ser Glu Ser Cys Ser Met Leu Pro Trp Xaa Ala Gln
                            120
Leu Leu Asp Arg Thr Ile Gly Pro Leu Tyr Leu Leu Phe Val Gln Phe
                        135
Ser Pro Ala Phe Ser Arg Thr Ser Pro Trp Arg Ser Pro Lys Asn Phe
145
Arg Arg Leu Tyr Pro Pro Cys Thr Thr Ser Gly Cys Ala Ala Arg Trp
Xaa Phe Ser Xaa
           180
<210> 402
<211> 21
<212> PRT
<213> Homo sapiens
```

```
<400> 402
Met Pro Thr Pro Cys Thr Ser Leu Pro Ser Cys Cys Gln His Arg Ser
                                    10
Ile Thr Met Thr Leu
            20
<210> 403
<211> 60
<212> PRT
<213> Homo sapiens
<400> 403
Met Pro Leu Phe Ile Pro Leu Ile Phe Phe Leu Ser Leu Leu His Cys
                                     10
Gln Ser Lys His Pro Ile Gln Met Ser Leu Cys Met Cys Val Asn Ile
                                 25
Ser Leu Val Trp Ser Pro Val Arg Trp Ile Phe Gly Ser Lys Gly Leu
Phe Ser Val His Leu Gln Ser Ser Gln Arg Pro Ser
<210> 404
<211> 185
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 404
Met Ala Gly Pro Arg Pro Xaa Trp Arg Asp Gln Leu Leu Phe Met Ser
Ile Ile Val Leu Val Ile Val Val Ile Cys Leu Met Leu Tyr Ala Leu
Leu Trp Glu Ala Gly Asn Leu Thr Asp Leu Pro Asn Leu Arg Ile Gly
Phe Tyr Asn Phe Cys Leu Trp Asn Glu Asp Thr Ser Thr Leu Gln Cys
His Gln Phe Pro Glu Leu Glu Ala Leu Gly Val Pro Arg Val Gly Leu
Gly Leu Ala Arg Leu Gly Val Tyr Gly Ser Leu Val Leu Thr Leu Phe
```

Ala Pro Gln Pro Leu Leu Ala Gln Cys Asn Ser Asp Glu Arg Ala
100 105 110

```
Trp Arg Leu Ala Val Gly Phe Leu Ala Val Ser Ser Val Leu Leu Ala
  Gly Gly Leu Gly Leu Phe Leu Ser Tyr Val Trp Lys Trp Val Arg Leu
                          135
 Ser Leu Pro Gly Pro Gly Phe Leu Ala Leu Gly Ser Ala Gln Ala Leu
 Leu Ile Leu Leu Leu Ile Ala Met Ala Val Phe Pro Leu Arg Ala Glu
                                      170
 Arg Ala Glu Ser Lys Leu Glu Ser Cys
 <210> 405
 <211> 480
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (16)
_ <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (27)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (33)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (35)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (36)
 <223> Xaa equals any of the naturally occurring L-amino acids
. <220>
 <221> SITE
 <222> (41)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (57)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
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<221> SITE

<222> (480)

<223> Xaa equals stop translation

<400> 405

Met Ser Asp Gly Phe Asp Arg Ala Pro Gly Ala Gly Arg Gly Arg Xaa 1 5 10 15

Arg Gly Leu Gly Arg Gly Gly Gly Gly Pro Xaa Gly Gly Gly Phe Pro 20 25 30

Xaa Gly Xaa Xaa Pro Ala Glu Arg Xaa Arg His Gln Pro Pro Gln Pro
35 40 45

Lys Ala Pro Gly Phe Leu Gln Pro Xaa Pro Leu Arg Gln Pro Arg Thr 50 55 60

Thr Pro Pro Pro Gly Ala Gln Cys Glu Val Pro Ala Ser Pro Gln Arg
65 70 75 80

Pro Ser Arg Pro Gly Ala Leu Pro Glu Gln Thr Arg Pro Leu Arg Ala 85 90 95

Pro Pro Ser Ser Gln Asp Lys Ile Pro Gln Gln Asn Ser Glu Ser Ala
100 105 110

Met Ala Lys Pro Gln Val Val Val Ala Pro Val Leu Met Ser Lys Leu
115 120 125

Ser Val Asn Ala Pro Glu Phe Tyr Pro Ser Gly Tyr Ser Ser Ser Tyr 130 135 140

Thr Glu Ser Tyr Glu Asp Gly Cys Glu Asp Tyr Pro Thr Leu Ser Glu 145 150 155 160

Tyr Val Gln Asp Phe Leu Asn His Leu Thr Glu Gln Pro Gly Ser Phe 165 170 175

Glu Thr Glu Ile Glu Gln Phe Ala Glu Thr Leu Asn Gly Cys Val Thr 180 185 190

Thr Asp Asp Ala Leu Gln Glu Leu Val Glu Leu Ile Tyr Gln Gln Ala 195 200 205

Thr Ser Ile Pro Asn Phe Ser Tyr Met Gly Ala Arg Leu Cys Asn Tyr 210 215 220

Leu Ser His His Leu Thr Ile Ser Pro Gln Ser Gly Asn Phe Arg Gln 225 230 235 240

Leu Leu Gln Arg Cys Arg Thr Glu Tyr Glu Val Lys Asp Gln Ala 245 250 255

Ala Lys Gly Asp Glu Val Thr Arg Lys Arg Phe His Ala Phe Val Leu 260 265 270

Phe Leu Gly Glu Leu Tyr Leu Asn Leu Glu Ile Lys Gly Thr Asn Gly 275 280 285

```
Gln Val Thr Arg Ala Asp Ile Leu Gln Val Gly Leu Arg Glu Leu Leu 290 295 300
```

Asn Ala Leu Phe Ser Asn Pro Met Asp Asp Asn Leu Ile Cys Ala Val 305 310 315 320

Lys Leu Leu Lys Leu Thr Gly Ser Val Leu Glu Asp Ala Trp Lys Glu
325 330 335

Lys Gly Lys Met Asp Met Glu Glu Ile Ile Gln Arg Ile Glu Asn Val 340 345 350

Val Leu Asp Ala Asn Cys Ser Arg Asp Val Lys Gln Met Leu Leu Lys . 355 360 365

Leu Val Glu Leu Arg Ser Ser Asn Trp Gly Arg Val His Ala Thr Ser 370 375 380

Thr Tyr Arg Glu Ala Thr Pro Glu Asn Asp Pro Asn Tyr Phe Met Asn 385 390 395 400

Glu Pro Thr Phe Tyr Thr Ser Asp Gly Val Pro Phe Thr Ala Ala Asp 405 410 415

Pro Asp Tyr Gln Glu Lys Tyr Gln Glu Leu Leu Glu Arg Glu Asp Phe 420 425 430

Phe Pro Asp Tyr Glu Glu Asn Gly Thr Asp Leu Ser Gly Ala Gly Asp
435
440
445

Pro Tyr Leu Asp Asp Ile Asp Asp Glu Met Asp Pro Glu Ile Glu Glu 450 450

Ala Tyr Glu Lys Phe Cys Leu Glu Ser Glu Arg Lys Arg Lys Gln Xaa 465 470 475 480

<210> 406

<211> 193

<212> PRT

<213> Homo sapiens

<400> 406

Met Lys Thr Leu Ile Val Ala Val Leu Leu Ala Gly Val Val Pro Leu 1 5 10 15

Leu Leu Gly Leu Phe Glu Leu Val Ile Val Ala Pro Leu Arg Val
20 25 30

Pro Leu Asp Gln Thr Pro Leu Phe Tyr Pro Trp Gln Asp Trp Ala Leu 35 40 45

Gly Val Leu His Ala Lys Ile Ile Ala Ala Ile Thr Leu Met Gly Pro 50 55 60

```
Gln Trp Trp Leu Lys Thr Val Ile Glu Gln Val Tyr Ala Asn Gly Ile
65 70 75 80
```

Arg Asn Ile Asp Leu His Tyr Ile Val Arg Lys Leu Ala Ala Pro Val 85 90 95

Ile Ser Val Leu Leu Leu Ser Leu Cys Val Pro Tyr Val Ile Ala Ser 100 105 110

Gly Val Val Pro Leu Leu Gly Val Thr Ala Glu Met Gln Asn Leu Val 115 120 125

His Arg Arg Ile Tyr Pro Phe Leu Leu Met Val Val Leu Met Ala 130 135 140

Lys Asn Asp Lys Tyr Leu Val Gly Gln Arg Leu Val Asn Tyr Glu Arg 165 170 175

Lys Ser Gly Lys Gln Gly Ser Ser Pro Pro Pro Pro Gln Ser Ser Gln 180 185 190

Glu

<210> 407

<211> 78

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (78)

<223> Xaa equals stop translation

<400> 407

Met Leu Arg Leu Asp Ile Ile Asn Ser Leu Val Thr Thr Val Phe Met 1 5 10 15

Leu Ile Val Ser Val Leu Ala Leu Ile Pro Glu Thr Thr Thr Leu Thr 20 25 30

Val Gly Gly Val Phe Ala Leu Val Thr Ala Val Cys Cys Leu Ala
35 40 45

Asp Gly Ala Leu Ile Tyr Arg Lys Leu Leu Phe Asn Pro Ser Gly Pro 50 55 60

Tyr Gln Lys Lys Pro Val His Glu Lys Lys Glu Val Leu Xaa 65 70 75

<210> 408

<211> 74

```
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (74)
<223> Xaa equals stop translation
<400> 408
Met Leu Lys Gln Val Met Phe Val Phe Ser Gly Met Gly Pro Arg Ser
His Cys Trp Gly Leu Pro Leu His Val Ala Pro Leu Cys Arg Gly His
Gln Ala Asp Ser Ser His Leu Leu Pro Leu Lys His Gln Gly Ala Trp
Asn Arg Asn Leu Ala Asn Gln Arg His Phe Phe Cys Pro Ser Ile Phe
His Thr Cys Pro Thr Val Leu Phe Phe Xaa
<210> 409
<211> 20
<212> PRT
<213> Homo sapiens
<400> 409
Ala Arg Thr Ile Leu Val Leu Tyr Leu Ser Leu Gln Arg Leu Glu Asn
Leu Ala Tyr His
<210> 410
<211> 87
<212> PRT
<213> Homo sapiens
<400> 410
Met Pro Leu Pro Ser Val Pro Ile Leu Gly Ile Phe Ser Phe Leu Ile
                5
Pro Ser Ser Gln Gly Val Ser Tyr Thr Lys Leu Pro Ile Ser Ser Pro
             20
Gln Tyr Ser Pro Phe Val Asn Asp His Phe Ser Phe Leu Asn Pro Phe
Pro Val Gln Ile His Thr Gly Phe Ala Arg Val Gly Ser Tyr Met Gln
    50
Met Pro Leu Val His Leu Cys Leu Leu Gln Thr Ser Leu Met Lys Asn
                     70
```

```
Ser Gly Val Gln Gln Gly Ser
                85
<210> 411
<211> 92
<212> PRT
<213> Homo sapiens
<400> 411
Met Asn Ala Ala Met Val His Ile Asn Arg Ala Leu Lys Leu Ile Ile
Arg Leu Phe Leu Val Glu Asp Leu Val Asp Ser Leu Lys Leu Ala Val
             20
Phe Met Trp Leu Met Thr Tyr Val Gly Ala Val Phe Asn Gly Ile Thr
Leu Leu Ile Leu Ala Glu Leu Leu Ile Phe Ser Val Pro Ile Val Tyr
Glu Lys Tyr Lys Thr Gln Ile Asp His Tyr Val Gly Ile Ala Arg Asp
Gln Thr Lys Ser Ile Val Glu Lys Ile Pro Ser Lys
                85
<210> 412
<211> 21
<212> PRT
<213> Homo sapiens
<400> 412
Met Ala Cys Ser Cys Leu Met Ile Gln Ser Phe Ser Thr Ser Ala Leu
Val Leu Phe Tyr Gly
             20
<210> 413
<211> 174
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (174)
<223> Xaa equals stop translation
```

<400> 413

Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile Lys Met Val His Leu 1 5 10 15

Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met Trp Val Thr Phe Val
20 25 30

Ser Gly Phe Pro Ala Phe Pro Lys Pro Ser Pro Thr Tyr Leu Arg Thr . 35 40 45

Ser Ala Glu Gln Thr Leu Pro Leu Leu Pro His Leu His Gly Leu
50 60

Cys Leu His Gln Pro Leu His Leu Gly Phe Thr Ala Cys Leu Gly Ser 65 70 75 80

Ala His Ile Leu Gly Gly Gln Pro Ala Leu Pro Ala Val Pro Glu Pro 85 90 95

Tyr Ala Gly His Cys Gln Arg Pro Leu Ala Gly Thr Pro His His Ser \$100\$

Cys His Val Gly Pro Ala Asn Arg Gly Arg Arg Ser Glu Ala Trp Val 115 120 125

Gly Arg Tyr Gln Ala Ala Asn Arg Phe Pro Ile Leu Asn Ala Xaa Cys 130 135 140

Glu Arg Arg Thr Pro Ser Thr Val Leu Ser Ala Arg Ile Ser Ser Ala 145 150 155 160

Thr Met Gly Cys Pro Leu Phe Ala Ile Trp Ala Ala Ser Xaa 165 170

<210> 414

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals stop translation

<400> 414

Met Ala Phe Ile Leu Leu Phe Tyr Cys Leu Met Thr Phe Leu Ser Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Glu Gln Asn Ser Ala Thr Val Glu Pro Ser Ser His Glu Ile Leu His

Leu Leu Gln Asn Cys Phe Glu Leu Leu Arg Thr Ser Thr Ser Gln Cys 35 40 45

Thr Glu Gly Ile Pro Cys Gln Arg Tyr Gln Asn Gly Leu His Ile Xaa 50 55 60

```
<210> 415
<211> 280
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (280)
<223> Xaa equals stop translation
<400> 415
Met Glu Ala Val Val Asn Leu Tyr Gln Glu Val Met Lys His Ala Asp
Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser Pro Leu Leu Met Thr
Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu Ser Leu Gly Pro Arg
Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg Gly Phe Met Ile Val
Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr Ile Val Tyr Glu Phe
                    70
Leu Met Ser Gly Trp Leu Ser Thr Tyr Thr Trp Arg Cys Asp Pro Val
                                     90
Asp Tyr Ser Asn Ser Pro Glu Ala Leu Arg Met Val Arg Val Ala Trp
            100
                                105
Leu Phe Leu Phe Ser Lys Phe Ile Glu Leu Met Asp Thr Val Ile Phe
                            120
Ile Leu Arg Lys Lys Asp Gly Gln Val Thr Phe Leu His Val Phe His
                        135
His Ser Val Leu Pro Trp Ser Trp Trp Trp Gly Val Lys Ile Ala Pro
                    150
Gly Gly Met Gly Ser Phe His Ala Met Ile Asn Ser Ser Val His Val
                                    170
Ile Met Tyr Leu Tyr Tyr Gly Leu Ser Ala Phe Gly Pro Val Ala Gln
Pro Tyr Leu Trp Trp Lys Lys His Met Thr Ala Ile Gln Leu Ile Gln
Phe Val Leu Val Ser Leu His Ile Ser Gln Tyr Tyr Phe Met Ser Ser
                        215
Cys Asn Tyr Gln Tyr Pro Val Ile Ile His Leu Ile Trp Met Tyr Gly
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225 230 235 240 Thr Ile Phe Phe Met Leu Phe Ser Asn Phe Trp Tyr His Ser Tyr Thr 245 Lys Gly Lys Arg Leu Pro Arg Ala Leu Gln Gln Asn Gly Ala Pro Gly Ile Ala Lys Val Lys Ala Asn Xaa <210> 416 <211> 284 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (22) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (284) <223> Xaa equals stop translation <400> 416 Met Xaa Leu Trp Pro Gln Thr Cys Ser Gly Lys Phe Asp Gly Thr Leu Ala Phe Ser Ile His Xaa Leu Ala Val Ile Leu Gly Asp Gln Leu Thr 25 Ala Ala Asp Leu Val Pro Ile Phe Asn Gly Phe Leu Lys Asp Leu Asp Glu Val Arg Ile Gly Val Leu Lys His Leu His Asp Phe Leu Lys Leu Leu His Ile Asp Lys Arg Arg Glu Tyr Leu Tyr Gln Leu Gln Glu Phe Leu Val Thr Asp Asn Ser Arg Asn Trp Arg Phe Arg Ala Glu Leu Ala Glu Gln Leu Ile Leu Leu Glu Leu Tyr Ser Pro Arg Asp Val Tyr 100 Asp Tyr Leu Arg Pro Ile Ala Leu Asn Leu Cys Ala Asp Lys Val Ser 120 Ser Val Arg Trp Ile Ser Tyr Lys Leu Val Ser Glu Met Val Lys Lys

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130
                        135
                                             140
Leu His Ala Ala Thr Pro Pro Thr Phe Gly Val Asp Leu Ile Asn Glu
145
                    150
                                         155
Leu Val Glu Asn Phe Gly Arg Cys Pro Lys Trp Ser Gly Arg Gln Ala
                                     170
Phe Val Phe Val Cys Gln Thr Val Ile Glu Asp Asp Cys Leu Pro Met
Asp Gln Phe Ala Val His Leu Met Pro His Leu Leu Thr Leu Ala Asn
                            200
Asp Arg Val Pro Asn Val Arg Val Leu Leu Ala Lys Thr Leu Arg Gln
                        215
Thr Leu Leu Glu Lys Asp Tyr Phe Leu Ala Ser Ala Ser Cys His Gln
Glu Ala Val Glu Gln Thr Ile Met Ala Leu Gln Met Asp Arg Asp Ser
                                    250
Asp Val Lys Tyr Phe Ala Ser Ile His Pro Ala Ser Thr Lys Ile Ser
            260
                                 265
Glu Asp Ala Met Ser Thr Ala Ser Ser Thr Tyr Xaa
       275
                            280
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Met Leu Phe Leu Phe Phe Val Ile Ile Phe Leu Phe Val Phe Leu Ile
Leu Ile Ile Gln Phe Ser Lys Pro Leu Thr Asn Pro His Pro Pro Ala
Gly Xaa Ser Asp Arg Arg Arg Tyr Ser Ser Tyr Arg Ser His Asp
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35 40 45 His Tyr Gln Arg Gln Arg Val Leu Gln Lys Glu Arg Ala Ile Glu Glu 50 Arg Arg Val Val Phe Ile Gly Lys Ile Pro Gly Arg Met Thr Arg Ser Glu Leu Lys Gln Arg Phe Ser Val Phe Gly Glu Ile Glu Glu Cys Thr Ile His Phe Arg Val Gln Gly Asp Asn Tyr Gly Phe Val Thr Tyr Arg Tyr Ala Glu Glu Ala Phe Ala Ala Ile Glu Ser Gly His Lys Leu Arg 120 Gln Ala Asp Glu Gln Pro Phe Asp Leu Cys Phe Gly Gly Arg Arg Xaa Xaa Cys Lys Arg Ser Tyr Ser Asp Leu Asp Ser Asn Arg Glu Asp Phe 150 155 Asp Pro Ala Pro Val Lys Ser Lys Phe Asp Ser Leu Asp Phe Asp Thr 165 170 Leu Leu Lys Gln Ala Gln Lys Asn Leu Arg Arg 180 <210> 418 <211> 237 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (197) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (198) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (200) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (202) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (204)

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Met Lys Leu Pro Gly Lys Phe Arg Arg Ala His Gln Gly Asn Leu Glu
Ser Gln Leu Thr Ser Glu Ser Tyr Tyr Lys Glu Thr Leu Ser Val Pro
                                 25
Thr Val Glu His Ile Ile Gln Glu Leu Lys Asp Ile Phe Ser Glu Gln
         35
His Leu Lys Ala Leu Lys Cys Leu Ser Leu Val Pro Ser Val Met Gly
                         55
Gln Leu Lys Phe Asn Thr Ser Glu Glu His His Ala Asp Met Tyr Arg
```

65					70					75					80
Ser	Asp	Leu	Pro	Asn 85	Pro	Asp	Thr	Leu	Ser 90	Ala	Glu	Leu	His	Cys 95	Trp
Arg	Ile	Lys	Trp 100	Lys	His	Arg	Gly	Lys 105	Asp	Ile	Glu	Leu	Pro 110	Ser	Thr
Ile	Tyr	Glu 115	Ala	Leu	His	Leu	Pro 120	Asp	Ile	Lys	Phe	Phe 125	Pro	Asn	Val
Tyr	Ala 130	Leu	Leu	Lys	Val	Leu 135	Cys	Ile	Leu	Pro	Val 140	Met	Lys	Val	Glu
Asn 145	Glu	Arg	Tyr	Glu	Asn 150	Gly	Arg	Lys	Arg	Leu 155	Lys	Ala	Tyr	Leu	Arg 160
Asn	Thr	Leu	Thr	Asp 165	Gln	Arg	Ser	Ser	Asn 170	Leu	Ala	Leu	Leu	Asn 175	Ile
Asn	Phe	Asp	Ile 180	Lys	His	Asp	Leu	Asp 185	Leu	Met	Val	Asp	Thr 190	Tyr	Ile
Lys	Leu	Tyr 195	Thr	Xaa	Xaa	Ser	Xaa 200	Leu	Xaa	Thr	Xaa	Xaa 205	Ser	Xaa	Xaa
Val	Glu 210	Xaa	Xaa	Xaa	Xaa	Xaa 215	Xaa	Xaa	Xaa	Xaa	Gly 220	Xaa	Xaa	Xaa	Xaa
Asp 225	Xaa	Xaa	Xaa	Arg	Glu 230	Lys	Ala	Val	Arg	Cys 235	Met	Xaa			
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Asn	Met	Arg	Ala 20	Phe	Gly	Gly	Ile	Leu 25	Val	Val	Val	Tyr	Tyr 30	Val	Phe
Ala	Ile	Ile 35	Gly	Ile	Asn	Leu	Phe 40	Arg	Gly	Val	Ile	Val 45	Ala	Leu	Pro
Gly	Asn 50	Ser	Ser	Leu	Ala	Pro 55	Ala	Asn	Gly	Ser	Ala 60	Pro	Cys	Gly	Ser
Phe 65	Glu	Gln	Leu	Glu	Tyr 70	Trp	Ala	Asn	Asn	Phe 75	Asp	Asp	Phe	Ala	Ala 80

Ala Leu Val Thr Leu Trp Asn Leu Met Val Val Asn Asn Trp Gln Val 85 90 95

Phe Leu Asp Ala Tyr Arg Arg Tyr Ser Gly Pro Trp Ser Lys Ile Tyr
100 105 110

Phe Val Leu Trp Trp Leu Val Ser Ser Val Ile Trp Val Asn Leu Phe 115 120 125

Leu Ala Leu Ile Leu Glu Asn Phe Leu His Lys Trp Asp Pro Arg Ser 130 135 140

His Leu Gln Pro Leu Ala Gly Thr Pro Glu Ala Thr Tyr Gln Met Thr 145 150 155 160

Val Glu Leu Leu Phe Arg Asp Ile Leu Glu Glu Pro Gly Glu Asp Glu 165 170 175

Leu Thr Glu Arg Leu Ser Gln His Pro His Leu Trp Leu Cys Arg Xaa 180 185 190

<210> 420

<211> 21

<212> PRT

<213> Homo sapiens

<400> 420

Asn Val Val Val Ala Phe Gly Leu Ile Leu Ile Ile Glu Ser Leu

1 5 10 15

Gly Glu Gln Cys Pro

<210> 421

<211> 51

<212> PRT

<213> Homo sapiens

<220>

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<222> (51)

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<400> 421

Met Asn Trp Gly Leu Ser Ile Trp Leu His Tyr Tyr Glu Lys Lys Lys 1 10 15

Glu Gln Val Phe Leu Val Ile Leu Ala His Val Val Arg Arg Cys Ala 20 25 30

Ser Asp Gly Ile Leu Gln Phe Glu Ser Ser Leu Leu Lys Met Arg Arg

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Ala Pro Xaa
    50
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<211> 32
<212> PRT
<213 > Homo sapiens
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Met Leu Ile Ile Ser Leu Arg Pro Gln Phe Pro Ser Leu Ile Val Gln
Leu Glu Cys Ser Val Leu Phe Leu Pro Ile Ser Leu Asn Leu Leu
<210> 423
<211> 163
<212> PRT
<213> Homo sapiens
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<222> (163)
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Met Val Lys Val Cys Asn Asp Ser Asp Arg Trp Ser Leu Ile Ser Leu
Ser Asn Asn Ser Gly Lys Asn Val Glu Leu Lys Phe Val Asp Ser Leu
Arg Arg Gln Phe Glu Phe Ser Val Asp Ser Phe Gln Ile Lys Leu Asp
Ser Leu Leu Phe Tyr Glu Cys Ser Glu Asn Pro Met Thr Glu Thr
Phe His Pro Thr Ile Ile Gly Glu Ser Val Tyr Gly Asp Phe Gln Glu
Ala Phe Asp His Leu Cys Asn Lys Ile Ile Ala Thr Arg Asn Pro Glu
Glu Ile Arg Gly Gly Leu Leu Lys Tyr Cys Asn Leu Leu Val Arg
                                105
Gly Phe Arg Pro Ala Ser Asp Glu Ile Lys Thr Leu Gln Arg Tyr Met
Cys Ser Arg Phe Phe Ile Asp Phe Ser Asp Ile Gly Glu Gln Gln Arg
                        135
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Lys Leu Glu Ser Tyr Leu Gln Asn His Phe Val Gly Ile Gly Arg Pro
145 150 155 160
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Gln Val Xaa

```
<210> 424
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<213> Homo sapiens

<220>

<221> SITE

<222> (174)

<223> Xaa equals stop translation

<400> 424

Met Ala Pro Lys Gly Lys Val Gly Thr Arg Gly Lys Lys Gln Ile Phe 1 10 15

Glu Glu Asn Arg Glu Thr Leu Lys Phe Tyr Leu Arg Ile Ile Leu Gly
20 25 30

Ala Asn Ala Ile Tyr Cys Leu Val Thr Leu Val Phe Phe Tyr Ser Ser 35 40 45

Ala Ser Phe Trp Ala Trp Leu Ala Leu Gly Phe Ser Leu Ala Val Tyr 50 55 60

Gly Ala Ser Tyr His Ser Met Ser Ser Met Ala Arg Ala Ala Phe Ser 65 70 75 80

Glu Asp Gly Ala Leu Met Asp Gly Gly Met Asp Leu Asn Met Glu Gln 85 90 95

Gly Met Ala Glu His Leu Lys Asp Val Ile Leu Leu Thr Ala Ile Val 100 105 110

Gln Val Leu Ser Cys Phe Ser Leu Tyr Val Trp Ser Phe Trp Leu Leu 115 120 125

Ala Pro Gly Arg Ala Leu Tyr Leu Leu Trp Val Asn Val Leu Gly Pro 130 140

Trp Phe Thr Ala Asp Ser Gly Thr Pro Ala Pro Glu His Asn Glu Lys
145 150 155 160

Arg Gln Arg Arg Gln Glu Arg Arg Gln Met Lys Arg Leu Xaa 165 170

<211> 174

<212> PRT

<210> 425

<211> 50

<212> PRT

<213> Homo sapiens

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<220>
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 <222> (50)
 <223> Xaa equals stop translation
 <400> 425
 Met Glu Leu Pro Lys Gly Leu Gln Gly Val Gly Pro Val Ala Met Met
 Arg Pro Phe Tyr Leu Leu Pro Val Leu Cys Thr Gln Ala Leu Arg
 Gln Ser Gln Gly Lys Ser Pro Leu Leu Trp Lys Arg Thr Cys Cys Leu
                              40
 Ala Xaa
      50
<210> 426
 <211> 120
 <212> PRT
 <213> Homo sapiens
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 <222> (96)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 426
 Met Leu Gly Lys Gly Gly Gly Arg Ala Gly Leu Leu Arg Tyr Arg Leu
 Leu Tyr Phe Thr Leu Val Val Gly Glu Gly Glu Pro Gly Glu Asn Lys
 Val Thr Ile Pro Phe Phe Glu Thr Gly Lys Lys Ile Ile Phe Cys Ser
 Val Lys Met Val Glu Asn Ser Asn Val Pro Ser His Lys Gly Pro Val
 Pro Leu Arg Ser Glu Gln Trp Glu Leu Lys Ile Ser Glu Thr Leu Gly
                     70.
 Glu Gly Lys Ile Gly Phe Leu Leu Ile Gly Arg Cys Ser Ser Gly Xaa
 Gly Gly Leu Cys Phe Cys Trp Asp Val Leu Cys Cys Met Tyr Ala Tyr
 Met Asp Arg Ser Leu Leu Ser Leu
      115
 <210> 427
 <211> 159
 <212> PRT
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<213> Homo sapiens
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 <222> (159)
 <223> Xaa equals stop translation
 <400> 427
 Met Thr His Leu Leu Thr Ala Thr Val Thr Pro Ser Glu Gln Asn
     5
 Ser Ser Arg Glu Pro Gly Trp Glu Thr Ala Met Ala Lys Asp Ile Leu
 Gly Glu Ala Gly Leu His Phe Asp Glu Leu Asn Lys Leu Arg Val Leu
Asp Pro Glu Val Thr Gln Gln Thr Ile Glu Leu Lys Glu Glu Cys Lys
                         55
Asp Phe Val Asp Lys Ile Gly Gln Phe Gln Lys Ile Val Gly Gly Leu
Ile Glu Leu Val Asp Gln Leu Ala Lys Glu Ala Glu Asn Glu Lys Met
                 85
Lys Ala Ile Gly Ala Arg Asn Leu Leu Lys Ser Ile Ala Lys Gln Arg
                                105
Glu Ala Gln Gln Gln Leu Gln Ala Leu Ile Ala Glu Lys Lys Met
       115
Gln Leu Glu Arg Tyr Arg Val Glu Tyr Glu Ala Leu Cys Lys Val Glu
                        135
Ala Glu Gln Asn Glu Phe Ile Asp Gln Phe Ile Phe Gln Lys Xaa
145
<210> 428
<211> 154
<212> PRT
<213> Homo sapiens
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<222> (154)
<223> Xaa equals stop translation
<400> 428
Met Asn Val Gly Val Ala His Ser Glu Val Asn Pro Asn Thr Arg Val
                                    10
Met Asn Ser Arg Gly Met Trp Leu Thr Tyr Ala Leu Gly Val Gly Leu
Leu His Ile Val Leu Leu Ser Ile Pro Phe Phe Ser Val Pro Val Ala
                            40
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Trp Thr Leu Thr Asn Ile Ile His Asn Leu Gly Met Tyr Val Phe Leu
50 55 60

His Ala Val Lys Gly Thr Pro Phe Glu Thr Pro Asp Gln Gly Lys Ala 65 70 75 80

Arg Leu Leu Thr His Trp Glu Gln Leu Asp Tyr Gly Val Gln Phe Thr 85 90 95

Ser Ser Arg Lys Phe Phe Thr Ile Ser Pro Ile Ile Leu Tyr Phe Leu 100 105 110

Ala Ser Phe Tyr Thr Lys Tyr Asp Pro Thr His Phe Ile Leu Asn Thr
115 120 125

Ala Ser Leu Leu Ser Val Leu Ile Pro Lys Met Pro Gln Leu His Gly 130 135 140

Val Arg Ile Phe Gly Ile Asn Lys Tyr Xaa 145

<210> 429

<211> 204

<212> PRT

<213> Homo sapiens

<400> 429

Met Val Cys Gly Gly Phe Ala Cys Ser Lys Asn Cys Leu Cys Ala Leu 1 5 10 15

Asn Leu Leu Tyr Thr Leu Val Ser Leu Leu Leu Ile Gly Ile Ala Ala 20 25 30

Trp Gly Ile Gly Phe Gly Leu Ile Ser Ser Leu Arg Val Val Gly Val
35 40 45

Val Ile Ala Val Gly Ile Phe Leu Phe Leu Ile Ala Leu Val Gly Leu 50 55 60

Ile Gly Ala Val Lys His His Gln Val Leu Leu Phe Phe Tyr Met Ile
65 70 75 80

Ile Leu Leu Val Phe Ile Val Gln Phe Ser Val Ser Cys Ala Cys
85 90 95

Leu Ala Leu Asn Gln Glu Gln Gln Gly Gln Leu Leu Glu Val Gly Trp
100 105 110

Asn Asn Thr Ala Ser Ala Arg Asn Asp Ile Gln Arg Asn Leu Asn Cys 115 120 125

Cys Gly Phe Arg Ser Val Asn Pro Asn Asp Thr Cys Leu Ala Ser Cys 130 135 140

Val Lys Ser Asp His Ser Cys Ser Pro Cys Ala Pro Ile Ile Gly Glu 145 150 155 160

<221> SITE

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Tyr Ala Gly Glu Val Leu Arg Phe Val Gly Gly Ile Gly Leu Phe Phe
Ser Phe Thr Glu Ile Leu Gly Val Trp Leu Thr Tyr Arg Tyr Arg Asn
            180
                                 185
Gln Lys Asp Pro Arg Ala Asn Pro Ser Ala Phe Leu
<210> 430
<211> 67
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (67)
<223> Xaa equals stop translation
<400> 430
Met Leu Gln Ser Ile Ile Lys Asn Ile Trp Ile Pro Met Lys Pro Tyr
                                     10
Tyr Thr Lys Val Tyr Gln Glu Ile Trp Ile Gly Met Gly Leu Met Gly
Phe Ile Val Tyr Lys Ile Arg Ala Ala Asp Lys Arg Ser Lys Ala Leu
                             40
Lys Ala Ser Ala Pro Ala Pro Gly His His Asn Gln Ile Tyr Leu Glu
    50
Tyr Met Xaa
65
<210> 431
<211> 25
<212> PRT
<213> Homo sapiens
<400> 431
Met Leu Gly Val Ser Leu Phe Leu Leu Val Val Leu Tyr His Tyr Val
                 5
Ala Val Asn Asn Pro Lys Lys Gln Glu
            20
<210> 432
<211> 299
<212> PRT
<213> Homo sapiens
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<220>
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<222> (299)
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<400> 432
Met Ala Ala Xaa Glu Pro Ala Val Leu Ala Leu Pro Asn Ser Gly Ala
Gly Gly Ala Gly Ala Pro Ser Gly Thr Val Pro Val Leu Phe Cys Phe
Ser Val Phe Ala Arg Pro Ser Ser Val Pro His Gly Ala Gly Tyr Glu
Leu Leu Ile Gln Lys Phe Leu Ser Leu Tyr Gly Asp Gln Ile Asp Met
                         55
His Arg Lys Phe Val Val Gln Leu Phe Ala Glu Glu Trp Gly Gln Tyr
Val Asp Leu Pro Lys Gly Phe Ala Val Ser Glu Arg Cys Lys Val Arg
Leu Val Pro Leu Gln Ile Gln Leu Thr Thr Leu Gly Asn Leu Thr Pro
            100
Ser Ser Thr Val Phe Phe Cys Cys Asp Met Gln Glu Arg Phe Arg Pro
                            120
Ala Ile Lys Tyr Phe Gly Asp Ile Ile Ser Val Gly Gln Arg Leu Leu
Gln Gly Ala Arg Ile Leu Gly Ile Pro Val Ile Val Thr Glu Gln Tyr
                    150
                                        155
Pro Lys Gly Leu Gly Ser Thr Val Gln Glu Ile Asp Leu Thr Gly Val
                165
Lys Leu Val Leu Pro Lys Thr Lys Phe Ser Met Val Leu Pro Glu Val
Glu Ala Ala Leu Ala Glu Ile Pro Gly Val Arg Ser Val Val Leu Phe
        195
                            200
```

```
Gly Val Glu Thr His Val Cys Ile Gln Gln Thr Ala Leu Glu Leu Val
210 215 220
```

Gly Arg Gly Val Glu Val His Ile Val Ala Asp Ala Thr Ser Ser Arg 225 230 235 240

Ser Met Met Asp Arg Met Phe Ala Leu Glu Arg Leu Ala Xaa Gly 245 250

Ile Ile Val Thr Thr Ser Glu Ala Val Leu Leu Gln Leu Val Ala Asp 260 265 270

Lys Asp His Pro Lys Phe Lys Glu Ile Gln Asn Leu Ile Lys Ala Ser 275 280 285

Ala Pro Glu Ser Gly Leu Leu Ser Lys Val Xaa 290 295

<210> 433

<211> 86

<212> PRT

<213> Homo sapiens

<400> 433

Met Gln Ser Ser Tyr Ile Ile Ser Gly Cys Leu Phe Ser Ile Leu Phe
1 5 10 15

Pro Leu Phe Ile Ile Ser Ala Asn Glu Ala Lys Thr Pro Gly Lys Ala
20 25 30

Tyr Leu Phe Gln Leu Arg Leu Phe Ser Leu Val Val Phe Leu Ser Asn 35 40 45

Arg Leu Phe His Lys Thr Val Tyr Leu Gln Ser Ala Leu Ser Ser Ser 50 55 60

Thr Ser Ala Glu Lys Phe Pro Ser Pro His Pro Ser Pro Ala Lys Leu 65 70 75 80

Lys Ala Thr Ala Gly His

<210> 434

<211> 198

<212> PRT

<213> Homo sapiens

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<222> (193)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (196)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 435

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<223> Xaa equals stop translation
<400> 434
Met Phe Gly Cys Leu Val Ala Gly Arg Leu Val Gln Thr Ala Ala Gln
Gln Val Ala Glu Asp Lys Phe Val Phe Asp Leu Pro Asp Tyr Glu Ser
Ile Asn His Val Val Val Phe Met Leu Gly Thr Ile Pro Phe Pro Glu
                             40
Gly Met Gly Gly Ser Val Tyr Phe Ser Tyr Pro Asp Ser Asn Gly Met
Pro Val Trp Gln Leu Leu Gly Phe Val Thr Asn Gly Lys Pro Ser Ala
Ile Phe Lys Ile Ser Gly Leu Lys Ser Gly Glu Gly Ser Gln His Pro
Phe Gly Ala Met Asn Ile Val Arg Thr Pro Ser Val Ala Gln Ile Gly
            100
Ile Ser Val Glu Leu Leu Asp Ser Met Ala Gln Gln Thr Pro Val Gly
                            120
Asn Ala Ala Val Ser Ser Val Asp Ser Phe Thr Gln Phe Thr Gln Lys
Met Leu Asp Asn Phe Tyr Asn Phe Ala Ser Ser Phe Ala Val Ser Gln
Ala Gln Met Thr Pro Ser Pro Ser Glu Met Phe Ile Pro Ala Asn Val
                                    170
Val Leu Lys Trp Tyr Glu Asn Phe Gln Arg Arg Leu Ala Gln Asn Pro
                                185
Xaa Phe Trp Xaa Thr Xaa
        195
<210> 435
<211> 47
<212> PRT
<213> Homo sapiens
<220>
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<222> (47)
<223> Xaa equals stop translation
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Met Gly Leu Pro Leu Met Ala Leu Met Trp Ser Thr Leu Pro Ala Ser
1 10 15

Ala Gly Val Asn Phe Ile Leu Ala Leu Pro Leu Leu Leu Trp Lys 20 25 30

Asn Arg Gly Gly Val Gly Arg Ser Val Met Ser Ala Val Glu Xaa 35 40 45

<210> 436

<211> 370

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (370)

<223> Xaa equals stop translation

<400> 436

Met Lys Lys Val Glu Glu Lys Arg Val Asp Val Asn Ser Ala Val Ala 1 5 10 15

Met Gly Glu Val Ile Leu Ala Val Cys His Pro Asp Cys Ile Thr Thr 20 25 30

Ile Lys His Trp Ile Thr Ile Ile Arg Ala Arg Phe Glu Glu Val Leu 35 40 45

Thr Trp Ala Lys Gln His Gln Gln Arg Leu Glu Thr Ala Leu Ser Glu
50 60

Leu Val Ala Asn Ala Glu Leu Leu Glu Glu Leu Leu Ala Trp Ile Gln 65 70 75 80

Trp Ala Glu Thr Thr Leu Ile Gln Arg Asp Gln Glu Pro Ile Pro Gln
85 90 95

Asn Ile Asp Arg Val Lys Ala Leu Ile Ala Glu His Gln Thr Phe Met 100 105 110

Glu Glu Met Thr Arg Lys Gln Pro Asp Val Asp Arg Val Thr Lys Thr 115 120 125

Tyr Lys Arg Lys Asn Ile Glu Pro Thr His Ala Pro Phe Ile Glu Lys 130 135 140

Ser Arg Ser Gly Gly Arg Lys Ser Leu Ser Gln Pro Thr Pro Pro Pro 145 150 155 160

Met Pro Ile Leu Ser Gln Ser Glu Ala Lys Asn Pro Arg Ile Asn Gln 165 170 175

Leu Ser Ala Arg Trp Gln Gln Val Trp Leu Leu Ala Leu Glu Arg Gln
180 185

Arg Lys Leu Asn Asp Ala Leu Asp Arg Leu Glu Glu Leu Lys Glu Phe

<213> Homo sapiens

195 200 205 Ala Asn Phe Asp Phe Asp Val Trp Arg Lys Lys Tyr Met Arg Trp Met 210 Asn His Lys Lys Ser Arg Val Met Asp Phe Phe Arg Arg Ile Asp Lys Asp Gln Asp Gly Lys Ile Thr Arg Gln Glu Phe Ile Asp Gly Ile Leu Ala Ser Lys Phe Pro Thr Thr Lys Leu Glu Met Thr Ala Val Ala Asp Ile Phe Asp Arg Asp Gly Asp Gly Tyr Ile Asp Tyr Tyr Glu Phe Val 280 Ala Ala Leu His Pro Asn Lys Asp Ala Tyr Arg Pro Thr Thr Asp Ala Asp Lys Ile Glu Asp Glu Val Thr Arg Gln Val Ala Gln Cys Lys Cys 310 315 Ala Lys Arg Phe Gln Val Glu Gln Ile Gly Glu Asn Lys Tyr Arg Phe 325 330 Phe Leu Gly Asn Gln Phe Gly Asp Ser Gln Gln Leu Arg Leu Val Arg 340 345 Ile Leu Arg Asn Arg Asp Gly Ser Arg Trp Trp Arg Met Asp Gly Leu 360 Gly Xaa 370 <210> 437 <211> 30 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <400> 437 Met Asn Val Lys Thr Phe Ser Xaa Asp His Met His Phe Leu Cys Cys Leu Tyr Leu Arg Tyr Val Thr Phe Val Tyr Leu Asn Leu Phe 20 <210> 438 <211> 24 <212> PRT

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<400> 438
Met Glu Pro His Leu Arg Cys Arg Val Thr Arg Val Arg Gly Ser Leu
Gly Asn Thr Gly Arg Trp Leu Leu
             20
<210> 439
<211> 53
<212> PRT
<213> Homo sapiens
<220>
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<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 439
Met His Tyr Leu Val Leu Gly Gly Leu Gly Val Phe Leu Phe Phe Ser
                                    10
Cys Phe Val Phe Leu Phe Phe Xaa Phe Ser Phe Ala Phe Phe Pro Phe
            20
Tyr Leu Glu Gly Met Gly Gly Ser Gly Asn Arg Glu Val Gly Gly
Phe Cys Leu Phe Phe
    50
<210> 440
<211> 176
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (176)
<223> Xaa equals stop translation
<400> 440
Met Val Ser Lys Ala Leu Leu Arg Leu Val Ser Ala Val Asn Arg Arg
Arg Met Lys Leu Leu Gly Ile Ala Leu Leu Ala Tyr Val Ala Ser
Val Trp Gly Asn Phe Val Asn Met Arg Ser Ile Gln Glu Asn Gly Glu
Leu Lys Ile Glu Ser Lys Ile Glu Glu Met Val Glu Pro Leu Arg Glu
Lys Ile Arg Asp Leu Glu Lys Ser Phe Thr Gln Lys Tyr Pro Pro Val
                    70
                                         75
```

Lys Phe Leu Ser Glu Lys Asp Arg Lys Arg Ile Leu Ile Thr Gly Gly 85 90 95

Ala Gly Phe Val Gly Ser His Leu Thr Asp Lys Leu Met Met Asp Gly 100 105 110

His Glu Val Thr Val Val Asp Asn Phe Phe Thr Gly Arg Lys Arg Asn 115 120 125

Val Glu His Trp Ile Gly His Glu Asn Phe Glu Leu Ile Asn His Asp 130 135 140

Val Trp Ser Pro Ser Thr Ser Arg Leu Thr Arg Tyr Thr Ile Trp His 145 150 155 160

Leu Gln Pro Pro Leu Gln Thr Thr Cys Ile Ile Leu Ser Arg His Xaa 165 170 175

<210> 441

<211> 77

<212> PRT

<213> Homo sapiens

<400> 441

Met Leu Arg Cys Trp Pro Leu Phe Trp Leu Pro Leu Val Ser Pro Phe 1 5 10 15

Cys Ser Leu Phe Trp Leu Leu Val Glu Trp Phe Gly Thr Asn Ile Asp 20 25 30

Arg Glu Ser Tyr Asp Ala Ile Gly Gly Pro Ser Trp Met Thr Ala Ser 35 40 45

Ser Phe Cys Leu Ser Asn Ser Asn Ile Trp Ser Leu Glu Ile Ser Ser 50 55 60

Gly Ser Thr Ser Val Val His Ser Gln Gln Ala Met Asp
65 70 75

<210> 442

<211> 32

<212> PRT

<213> Homo sapiens

<400> 442

Met Arg Ser Cys Glu Ile Gln Leu Cys Val Trp Leu Leu Val Ser Ser 1 5 10 15

His Val Asp Met Val Leu Gly Gly Ser Pro Ser Thr Leu Tyr Met Met 20 25 30

```
<210> 443
<211> 30
<212> PRT
<213> Homo sapiens
<400> 443
Met Val Val Asn Ser Leu Cys Phe Leu Ser Leu Leu Leu Val Ile Leu
Glu Leu Ser Thr Asp Ser Ser Ala Arg Leu Leu Tyr His Glu
                                25
<210> 444
<211> 69
<212> PRT
<213> Homo sapiens
<400> 444
Met Asp Lys Gln Lys His Leu Glu Val Arg Arg Ser Val Phe Lys Ile
Gln Gly Lys Ile Ala Phe Ser Leu Met Phe Val Leu Lys Asp Leu Ser
Pro Thr Ile Phe Ser His Ser Ile Leu Leu Leu Pro His His Val
                            40
Leu Pro Cys Thr Pro Gln Met Val Arg Gly Val Thr Gln Val Leu Arg
Glu Phe Gly Asp Gln
<210> 445
<211> 63
<212> PRT
<213> Homo sapiens
<400> 445
Met Val Thr Gly Val Asn Pro Pro Leu Pro Pro Gln Leu Gln His Pro
Arg Pro Ile Asn Gln Leu Gly Ser Gly Ser Phe Phe Phe Ser Ser Phe
           20
Val Met Leu Arg Phe Lys Met Cys Val Leu His Cys Tyr Arg Leu Leu
Phe Cys Leu Ile Lys Asp Phe Ser Pro Thr Phe Val Trp Thr His
    50 55
```

```
<211> 43
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (43)
<223> Xaa equals stop translation
<400> 446
Met Lys Phe Ser Leu Val Leu Leu Ile Lys Ile Ile Ser Phe Glu Arg
Leu Leu Ile Phe Leu Phe Pro Leu Ser Phe Leu Pro Asn Ile Trp Arg
Arg Val Met Val Asn Leu Asn Ile Leu Phe Xaa
<210> 447
<211> 33
<212> PRT
<213> Homo sapiens
<400> 447
Met Leu Phe Pro Ser Leu Leu Phe Ala Ala Thr Tyr Asn Val Ala
Asn Pro Ser Arg Leu Ile Leu Tyr Met Ile Ser Ala Gly Ala Asp Ser
             20
Gln
<210> 448
<211> 53
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 448
Met Trp Gln Val Arg Gly Leu Pro Pro Val Pro Leu Leu Leu Thr Met
Ser Pro Pro Pro Cys Leu Ser Ser Pro Phe Pro Phe Ile Ser Val Pro
                                 25
Leu Phe Glu Ala Val Pro Ile Ser Val Ser Asp Gln Pro Ser Pro Xaa
Leu Thr Thr Leu Leu
    50
```

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<210> 449
<211> 64
<212> PRT
<213> Homo sapiens
<400> 449
Met Ile Thr Ser Val Leu Val Phe Leu Ile Phe Phe Phe Pro Tyr Leu
Ser Leu Val Thr Leu Leu Gln Ala Arg Asn Leu Trp Val Ile His Arg
Ala Ala Leu Cys Glu Ser Gly Leu Phe His Trp Arg Lys Gly Ile Glu
Asn Gln Leu Glu Pro Met Tyr Phe Leu Pro His Gly Thr Leu Phe Leu
<210> 450
<211> 34
<212> PRT
<213> Homo sapiens
<400> 450
Met Leu Tyr Ser Cys Glu Pro Tyr Leu Ile Ile Leu Asn Ile Tyr Ser
                                     10
Gln Lys Ala Phe Tyr Phe Tyr Phe Phe Glu Gly Ser Phe Ser Val Cys
Thr Leu
<210> 451
<211> 89
<212> PRT
<213> Homo sapiens
<400> 451
Met Arg Gln Arg Gln Ala Ala Cys Gln Pro Pro Pro Ser Arg Asn Gly
Leu Ala Gln Glu Cys Pro Pro His Ile Pro Ser Ser Phe Phe Leu Val
            20
Lys Leu Leu Phe Ile Pro Trp Leu Ala Ser Leu Leu Ser Ser Pro Leu
Asn Leu Leu Leu Val Ser Ile Ser Trp Asp Leu Gly Leu Lys Leu
```

Asn Leu Gln Gln Cys Arg Gln His Gln Val Leu Gln Glu Lys Asn Thr
65 70 75 80

Lys Lys Phe Asn Lys Lys Lys Lys Lys

<210> 452

<211> 350

<212> PRT

<213 > Homo sapiens

<400> 452

Met Asp Phe Ile Thr Ser Thr Ala Ile Leu Pro Leu Leu Phe Gly Cys 1 5 10 15

Leu Gly Val Phe Gly Leu Phe Arg Leu Leu Gln Trp Val Arg Gly Lys $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Ala Tyr Leu Arg Asn Ala Val Val Val Ile Thr Gly Ala Thr Ser Gly 35 40 45

Leu Gly Lys Glu Cys Ala Lys Val Phe Tyr Ala Ala Gly Ala Lys Leu 50 55 60

Val Leu Cys Gly Arg Asn Gly Gly Ala Leu Glu Glu Leu Ile Arg Glu 65 70 75 80

Leu Thr Ala Ser His Ala Thr Lys Val Gln Thr His Lys Pro Tyr Leu 85 90 95

Val Thr Phe Asp Leu Thr Asp Ser Gly Ala Ile Val Ala Ala Ala 100 105 110

Glu Ile Leu Gln Cys Phe Gly Tyr Val Asp Ile Leu Val Asn Asn Ala 115 120 125

Gly Ile Ser Tyr Arg Gly Thr Ile Met Asp Thr Thr Val Asp Val Asp 130 135

Lys Arg Val Met Glu Thr Asn Tyr Phe Gly Pro Val Ala Leu Thr Lys 145 150 155 160

Ala Leu Leu Pro Ser Met Ile Lys Arg Arg Gln Gly His Ile Val Ala 165 170 175

Ile Ser Ser Ile Gln Gly Lys Met Ser Ile Pro Phe Arg Ser Ala Tyr
180 185 190

Ala Ala Ser Lys His Ala Thr Gln Ala Phe Phe Asp Cys Leu Arg Ala 195 200 205

Glu Met Glu Gln Tyr Glu Ile Glu Val Thr Val Ile Ser Pro Gly Tyr 210 215 220

Ile His Thr Asn Leu Ser Val Asn Ala Ile Thr Ala Asp Gly Ser Arg 225 230 235 240

```
Tyr Gly Val Met Asp Thr Thr Ala Gln Gly Arg Ser Pro Val Glu
                245
Val Ala Gln Asp Val Leu Ala Ala Val Gly Lys Lys Lys Asp Val
Ile Leu Ala Asp Leu Leu Pro Ser Leu Ala Val Tyr Leu Arg Thr Leu
                            280
Ala Pro Gly Leu Phe Phe Ser Leu Met Pro Pro Gly Pro Glu Lys Ser
                        295
Gly Asn Pro Arg Thr Pro Ser Thr Leu Thr Ser Gln Gly Gln Gly Arg
                    310
Glu Ala Ala Leu Leu Gly Leu Leu Thr Leu Gln Gly Thr Val Ala Phe
                                    330
Val Glu Thr Leu Met Glu Ile Cys Leu Thr Ser Gly Lys Asp
                                345
<210> 453
<211> 49
<212> PRT
<213> Homo sapiens
<400> 453
Met Val Phe Leu Pro Arg Gly Val Val Val Ser Gly Gly Ala Ala Cys
                 5
Leu Trp Leu Thr Phe Ile Leu Glu Thr Glu Val Tyr Leu Asp Leu Ala
             20
                                 25
Thr Glu Ala Arg Ala His Ser Arg Met Gly Leu Gly Leu Trp Pro Pro
                             40
Asn
<210> 454
<211> 278
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (278)
<223> Xaa equals stop translation
Met Ala Ser Ala Glu Leu Asp Tyr Thr Ile Glu Ile Pro Asp Gln Pro
```

1				5					10					15	
Cys	Trp	Ser	Gln 20	Lys	Asn	Ser	Pro	Ser 25	Pro	Gly	Gly	Lys	Glu 30	Ala	Glu
Thr	Arg	Gln 35	Pro	Val	Val	Ile	Leu 40	Leu	Gly	Trp	Gly	Gly 45	Cys	Lys	Asp
Lys	Asn 50	Leu	Ala	Lys	Tyr	Ser 55	Ala	Ile	Tyr	His	Lys 60	Arg	Gly	Cys	Ile
Val 65	Ile	Arg	Tyr	Thr	Ala 70	Pro	Trp	His	Met	Val 75	Phe	Phe	Ser	Glu	Ser 80
Leu	Gly	Ile	Pro	Ser 85	Leu	Arg	Val	Leu	Ala 90	Gln	Lys	Leu	Leu	Glu 95	Leu
Leu	Phe	Asp	Tyr 100	Glu	Ile	Glu	Lys	Glu 105	Pro	Leu	Leu	Phe	His 110	Val	Phe
Ser	Asn	Gly 115	Gly	Val	Met	Leu	Tyr 120	Arg	Tyr	Val	Leu	Glu 125	Leu	Leu	Gln
Thr	Arg 130	Arg	Phe	Cys	Arg	Leu 135	Arg	Val	Val	Gly	Thr 140	Ile	Phe	Asp	Ser
Ala 145	Pro	Gly	Asp	Ser	Asn 150	Leu	Val	Gly	Ala	Leu 155	Arg	Ala	Leu	Ala	Ala 160
Ile	Leu	Glu	Arg	Arg 165	Ala	Ala	Met	Leu	Arg 170	Leu	Leu	Leu	Leu	Val 175	Ala
Phe	Ala	Leu	Val 180	Val	Val	Leu	Phe	His 185	Val	Leu	Leu	Ala	Pro 190	Ile	Thr
Ala	Xaa	Phe 195	His	Thr	His	Phe	Tyr 200	Asp	Arg	Leu	Gln	Asp 205	Ala	Gly	Ser
	Trp 210	Pro	Glu	Leu	Tyr	Leu 215	Tyr	Ser	Arg	Ala	Asp 220	Glu	Val	Val	Leu
Ala 225	Arg	Asp	Ile	Glu	Arg 230	Met	Val	Glu	Ala	Arg 235	Leu	Ala	Arg	Arg	Val 240
Leu	Ala	Arg	Ser	Val 245	Asp	Phe	Val	Ser	Ser 250	Ala	His	Val	Ser	His 255	Leu
Arg	Asp	Tyr	Pro 260	Thr	Tyr	Tyr	Thr	Ser 265	Leu	Cys	Val	Asp	Phe 270	Met	Arg
Asn	Cys	Val 275	Arg	Cys	Xaa										

<210> 455 <211> 199 <212> PRT <213> Homo sapiens

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<220>
<221> SITE
<222> (199)
<223> Xaa equals stop translation
<400> 455
Met Ser Phe Ile Phe Asp Trp Ile Tyr Ser Gly Phe Ser Ser Val Leu
Gln Phe Leu Gly Leu Tyr Lys Lys Thr Gly Lys Leu Val Phe Leu Gly
                                  25
Leu Asp Asn Ala Gly Lys Thr Thr Leu Leu His Met Leu Lys Asp Asp
                             40
Arg Leu Gly Gln His Val Pro Thr Leu His Pro Thr Ser Glu Glu Leu
                         55
Thr Ile Ala Gly Met Thr Phe Thr Thr Phe Asp Leu Gly Gly His Val
                     70
Gln Ala Arg Arg Val Trp Lys Asn Tyr Leu Pro Ala Ile Asn Gly Ile
Val Phe Leu Val Asp Cys Ala Asp His Glu Arg Leu Leu Glu Ser Lys
            100
Glu Glu Leu Asp Ser Leu Met Thr Asp Glu Thr Ile Ala Asn Val Pro
                            120
Ile Leu Ile Leu Gly Asn Lys Ile Asp Arg Pro Glu Ala Ile Ser Glu
Glu Arg Leu Arg Glu Met Phe Gly Leu Tyr Gly Gln Thr Thr Gly Lys
                    150
                                        155
Gly Ser Ile Ser Leu Lys Glu Leu Asn Ala Arg Pro Leu Glu Val Phe
Met Cys Ser Val Leu Lys Arg Gln Gly Tyr Gly Glu Gly Phe Arg Trp
                                185
Met Ala Gln Tyr Ile Asp Xaa
        195
<210> 456
<211> 258
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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```
<221> SITE
```

<222> (219)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (258)

<223> Xaa equals stop translation

<400> 456

Met Thr Leu Ser Arg Phe Ala Tyr Asn Gly Lys Arg Cys Pro Ser Ser 1 5 10 15

Tyr Asn Ile Leu Asp Asn Ser Lys Ile Ile Ser Glu Glu Cys Arg Lys
20 25 30

Glu Leu Thr Ala Leu Leu His His Tyr Tyr Pro Ile Glu Ile Asp Pro
35 40 45

His Arg Thr Val Lys Glu Lys Leu Pro His Met Val Glu Trp Trp Thr 50 55 60

Lys Ala His Asn Leu Leu Cys Gln Gln Lys Ile Gln Lys Phe Gln Ile
65 70 75 80

Ala Gln Val Val Arg Glu Ser Asn Ala Met Leu Arg Glu Gly Tyr Lys 85 90 95

Thr Phe Phe Asn Thr Leu Tyr His Asn Asn Ile Pro Leu Phe Ile Phe 100 105 110

Ser Ala Gly Ile Gly Asp Ile Leu Glu Glu Ile Ile Arg Gln Met Lys 115 120 125

Val Phe His Pro Asn Ile His Ile Val Ser Asn Tyr Met Asp Phe Asn 130 135 140

Glu Asp Gly Phe Leu Gln Gly Phe Lys Gly Gln Leu Ile His Thr Tyr 145 150 155 160

Asn Lys Asn Ser Ser Val Cys Glu Asn Xaa Gly Tyr Phe Gln Gln Leu 165 170 175

Glu Gly Lys Thr Asn Val Ile Leu Leu Gly Asp Ser Ile Gly Asp Leu
180 185 190

Thr Met Ala Asp Gly Val Pro Gly Val Gln Asn Ile Leu Lys Ile Gly 195 200 205

Phe Leu Asn Asp Lys Val Glu Glu Arg Arg Xaa Arg Tyr Met Asp Ser 210 215 220

Tyr Asp Ile Val Leu Glu Lys Asp Glu Thr Leu Asp Val Val Asn Gly 225 230 235 240

Leu Leu Gln His Ile Leu Cys Gln Gly Val Gln Leu Glu Met Gln Gly
245 250 255

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Pro Xaa
```

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<210> 457
<211> 87
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 457
Met Ser His Val Leu Leu Cys Pro Ser Leu Ser Cys Ser Asn Leu Leu
Pro Pro Ser His Ser Leu Gly Thr Met Gly Ser Leu Ser Pro His Leu
Cys Gly His Thr Met Cys Pro Val Asn Pro Glu Leu Pro Leu Ser Ser
Arg Leu Thr Thr Asp Gln Pro Gln Pro Asp Ala Cys Ser Pro Thr Leu
                         55
Leu Thr Leu Pro Leu Pro Ser Ser Phe Leu Pro His Ser Lys Pro Thr
                     70
                                         75
Phe Xaa His Pro Cys Ser Pro
                 85
<210> 458
<211> 315
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (315)
<223> Xaa equals stop translation
<400> 458
Met Phe Ser Ile Asn Pro Leu Glu Asn Leu Lys Val Tyr Ile Ser Ser
Arg Pro Pro Leu Val Val Phe Met Ile Ser Val Xaa Pro Met Ala Ile
             20
```

Ala Phe Leu Thr Leu Gly Tyr Phe Phe Lys Ile Lys Glu Ile Lys Ser

Pro Glu Met Ala Glu Asp Trp Asn Thr Phe Leu Leu Arg Phe Asn Asp 50 55 60

Leu Asp Leu Cys Val Ser Glu Asn Glu Thr Leu Lys His Leu Thr Asn 65 70 75 80

Asp Thr Thr Thr Pro Glu Ser Thr Met Thr Ser Gly Gln Ala Arg Ala 85 90 95

Ser Thr Gln Ser Pro Gln Ala Leu Glu Asp Ser Gly Pro Val Asn Ile 100 105 110

Ser Val Ser Ile Thr Leu Thr Leu Asp Pro Leu Lys Pro Phe Gly Gly
115 120 125

Tyr Ser Arg Asn Val Thr His Leu Tyr Ser Thr Ile Leu Gly His Gln
130 135 140

Ile Gly Leu Ser Gly Arg Glu Ala His Glu Glu Ile Asn Ile Thr Phe 145 150 155 160

Thr Leu Pro Thr Ala Trp Ser Ser Asp Asp Cys Ala Leu His Gly His 165 170 175

Cys Glu Gln Val Val Phe Thr Ala Cys Met Thr Leu Thr Ala Ser Pro 180 185 190

Gly Val Phe Pro Val Thr Val Gln Pro Pro His Cys Val Pro Asp Thr 195 200 . 205

Tyr Ser Asn Ala Thr Leu Trp Tyr Lys Ile Phe Thr Thr Ala Arg Asp 210 215 220

Ala Asn Thr Lys Tyr Ala Gln Asp Tyr Asn Pro Phe Trp Cys Tyr Lys 225 230 235 240

Gly Ala Ile Gly Lys Val Tyr His Ala Leu Asn Pro Lys Leu Thr Val 245 250 255

Ile Val Pro Asp Asp Asp Arg Ser Leu Ile Asn Leu His Leu Met His 260 265 270

Thr Ser Tyr Phe Leu Phe Val Met Val Ile Thr Met Phe Cys Tyr Ala 275 280 285

Val Ile Lys Gly Arg Pro Ser Lys Leu Arg Gln Ser Asn Pro Glu Phe 290 295 300

Cys Pro Glu Lys Val Ala Leu Ala Glu Ala Xaa 305 310 315

<210> 459

<211> 52

<212> PRT

<213> Homo sapiens

<400> 459

Met Pro Gly Leu Ser Leu Ala Leu Leu Pro Phe Gly Pro Gly Cys Thr
1 5 10 15

Glu Ala Leu His Ala Gly Cys Phe Pro Ala Phe Ala Ser Ala Thr Arg 20 25 30

Val Asn Gly Glu Ala Ala Leu Ser Pro Gly Leu Cys Asp Pro Ile Ser 35 40 45

Val Pro Tyr Val 50

<210> 460

<211> 383

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (383)

<223> Xaa equals stop translation

<400> 460

Met Ala Val Gly Gln Ile Met Thr Phe Gly Ser Pro Val Ile Gly Cys
1 10 15

Gly Phe Ile Ser Gly Trp Asn Leu Val Ser Met Cys Val Glu Tyr Val 20 25 30

Leu Leu Trp Lys Val Tyr Gln Lys Thr Pro Ala Leu Ala Val Lys Ala 35 40 45

Gly Leu Lys Glu Glu Glu Thr Glu Leu Lys Gln Leu Asn Leu His Lys
50 60

Asp Thr Glu Pro Lys Pro Leu Glu Gly Thr His Leu Met Gly Val Lys 65 70 75 80

Asp Ser Asn Ile His Glu Leu Glu His Glu Gln Glu Pro Thr Cys Ala 85 90 95

Ser Gln Met Ala Glu Pro Phe Arg Thr Phe Arg Asp Gly Trp Val Ser

Tyr Tyr Asn Gln Pro Val Phe Leu Ala Gly Met Gly Leu Ala Phe Leu 115 $120 \cdot 125$

Tyr Met Thr Val Leu Gly Phe Asp Cys Ile Thr Thr Gly Tyr Ala Tyr 130 135 140

Thr Gln Gly Leu Ser Gly Phe His Pro Gln Tyr Phe Asp Gly Ser Ile 145 150 155 160

Ser Tyr Asn Trp Asn Gly Asn Cys Ser Phe Tyr Leu Ala Thr Ser 165 170 175

Lys Met Trp Phe Gly Ser Ala Gly Leu Ile Ser Gly Leu Ala Gln Leu 180 185 190

Ser Cys Leu Ile Leu Cys Val Ile Ser Val Phe Met Pro Gly Ser Pro 195 200 205

Leu Asp Leu Ser Val Ser Pro Phe Glu Asp Ile Arg Ser Arg Phe Ile 210 215 220

Gln Gly Glu Ser Ile Thr Pro Thr Lys Ile Pro Glu Ile Thr Thr Glu 225 230 235 240

Ile Tyr Met Ser Asn Gly Ser Asn Ser Ala Asn Ile Val Pro Glu Thr
245 250 255

Ser Pro Glu Ser Val Pro Ile Ile Ser Val Ser Leu Leu Phe Ala Gly
260 265 270

Val Ile Ala Ala Arg Ile Gly Leu Trp Ser Phe Asp Leu Thr Val Thr 275 280 285

Gln Leu Leu Gln Glu Asn Val Ile Glu Ser Glu Arg Gly Ile Ile Asn 290 295 300

Gly Val Gln Asn Ser Met Asn Tyr Leu Leu Asp Leu Leu His Phe Ile 305 310 315 320

Met Val Ile Leu Ala Pro Asn Pro Glu Ala Phe Gly Leu Leu Val Leu 325 330 335

Ile Ser Val Ser Phe Val Ala Met Gly His Ile Met Tyr Phe Arg Phe 340 345 350

Ala Gln Asn Thr Leu Gly Asn Lys Leu Phe Ala Cys Gly Pro Asp Ala 355 360 365

Lys Glu Val Arg Lys Glu Asn Gln Ala Asn Thr Ser Val Val Xaa 370 375 380

<210> 461

<211> 186

<212> PRT

<213> Homo sapiens

<400> 461

Met Arg Ser Ile Gly Asn Lys Asn Thr Ile Leu Leu Gly Leu Gly Phe 1 5 10 15

Gln Ile Leu Gln Leu Ala Trp Tyr Gly Phe Gly Ser Glu Pro Trp Met
20 25 30

Met Trp Ala Ala Gly Ala Val Ala Ala Met Ser Ser Ile Thr Phe Pro 35 40 45

Ala Val Ser Ala Leu Val Ser Arg Thr Ala Asp Ala Asp Gln Gln Gly 50 55 60

Val Val Gln Gly Met Ile Thr Gly Ile Arg Gly Leu Cys Asn Gly Leu 65 70 75 80

Gly Pro Ala Leu Tyr Gly Phe Ile Phe Tyr Ile Phe His Val Glu Leu 85 90 95

Lys Glu Leu Pro Ile Thr Gly Thr Asp Leu Gly Thr Asn Thr Ser Pro 100 105 110

Gln His His Phe Glu Gln Asn Ser Ile Ile Pro Gly Pro Pro Phe Leu 115 120 125

Phe Gly Ala Cys Ser Val Leu Leu Ala Leu Leu Val Ala Leu Phe Ile 130 135 140

Pro Glu His Thr Asn Leu Ser Leu Arg Ser Ser Ser Trp Arg Lys His 145 150 155 160

Cys Gly Ser His Ser His Pro His Asn Thr Gln Ala Pro Gly Glu Ala 165 170 175

Lys Glu Pro Leu Leu Gln Asp Thr Asn Val 180 185

<210> 462

<211> 163

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (163)

<223> Xaa equals stop translation

<400> 462

Met Leu Gln Thr Ser Asn Tyr Ser Leu Val Leu Ser Leu Gln Phe Leu 1 5 10 15

Leu Leu Ser Tyr Asp Leu Phe Val Asn Ser Phe Ser Glu Leu Leu Gln 20 25 30

Lys Thr Pro Val Ile Gln Leu Val Leu Phe Ile Ile Gln Asp Ile Ala $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Val Leu Phe Asn Ile Ile Ile Ile Phe Leu Met Phe Phe Asn Thr Phe 50 55 60

Val Phe Gln Ala Gly Leu Val Asn Leu Leu Phe His Lys Phe Lys Gly 65 70 75 80

Thr Ile Ile Leu Thr Ala Val Tyr Phe Ala Leu Ser Ile Ser Leu His
85 90 95

Val Trp Val Met Asn Leu Arg Trp Lys Asn Ser Asn Ser Phe Ile Trp
100 105 110

Thr Asp Gly Leu Gln Met Leu Phe Val Phe Gln Arg Leu Ala Ala Val

```
115
                            120
                                               125
Leu Tyr Cys Tyr Phe Tyr Lys Arg Thr Ala Val Arg Leu Gly Asp Pro
                        135
His Phe Tyr Gln Asp Ser Leu Trp Leu Arg Lys Glu Phe Met Gln Val
                    150
                                         155
Arg Arg Xaa
<210> 463
<211> 46
<212> PRT
<213 > Homo sapiens
<400> 463
Met Arg Ile Gln Val Phe Ile Leu Leu Gly Ala Gly Gly Thr Ser
Gln Phe Thr Lys Pro Pro Ser Leu Pro Leu Glu Pro Glu Pro Ala Val
Glu Ser Ser Pro Thr Glu Thr Ser Glu Gln Ile Arg Glu Lys
<210> 464
<211> 105
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (105)
<223> Xaa equals stop translation
Met Ser Tyr Leu Ala Phe Leu Tyr Met Thr Phe Asp Phe Cys Cys Leu
Tyr Phe Ser Thr Val Tyr Ala Pro Ser Phe Lys Tyr Ile Cys Val His
Thr Asp Thr His Ile Cys Val Cys Val Cys Ile Tyr Leu Ser Ser Val
Val Ser Lys Ser Ser Ala Glu Ala Asp Gly Val Leu Gln Pro Arg Arg
His Pro Ala Ser Leu Leu Ile Val Phe Ala Thr Ser Ile Ser Glu Ser
                    70
Ser Leu Leu Ile Phe Ser Phe Gln Lys Thr Glu Ala Lys Leu Ile Val
```

Phe Ala Val Ser Leu Ala Ala Lys Xaa

105

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<210> 465
<211> 70
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (70)
<223> Xaa equals stop translation
<400> 465
Met Leu Pro Pro Phe Ser Leu Val Tyr Thr His Phe Leu Val Ala Ser
Leu Leu Pro Val Ile Leu Ala Val Phe Pro Asp Ser Ala Gln Ile Val
                                 25
Pro Leu Leu Lys Pro Ile Pro Arg Pro Gln Pro Glu Val Ile Phe Pro
                             40
Ser Ser Glu Leu Leu Glu Gln Leu Leu Ser Val Gln Phe Val Trp Gln
Ala His Thr Val Ala Xaa
<210> 466
<211> 155
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (155)
<223> Xaa equals stop translation
<400> 466
Met Ala Leu Leu Ser Val Leu Arg Val Leu Leu Gly Gly Phe Phe
                 5
Ala Leu Val Gly Leu Ala Lys Leu Ser Glu Glu Ile Ser Ala Pro Val
Ser Glu Arg Met Asn Ala Leu Phe Val Gln Phe Ala Glu Val Phe Pro
         35
                             40
Leu Lys Val Phe Gly Tyr Gln Pro Asp Pro Leu Asn Tyr Gln Ile Ala
Val Gly Phe Leu Glu Leu Leu Ala Gly Leu Leu Val Met Gly Pro
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Pro Met Leu Gln Glu Ile Ser Asn Leu Phe Leu Ile Leu Leu Met Met

Gly Ala Ile Phe Thr Leu Ala Ala Leu Lys Glu Ser Leu Ser Thr Cys 100 105 110

Ile Pro Ala Ile Val Cys Leu Gly Phe Leu Leu Leu Leu Asn Val Gly
115 120 125

Gln Leu Leu Ala Gln Thr Lys Lys Val Val Arg Pro Thr Arg Lys Lys 130 135 140

Thr Leu Ser Thr Phe Lys Glu Ser Trp Lys Xaa 145 150 150

<210> 467

<211> 332

<212> PRT

<213> Homo sapiens

<400> 467

Met Lys Leu Gly Arg Ala Val Leu Gly Leu Leu Leu Ala Pro Ser 1 5 10 15

Val Val Gln Ala Val Glu Pro Ile Ser Leu Gly Leu Ala Leu Ala Gly
20 25 30

Val Leu Thr Gly Tyr Ile Tyr Pro Arg Leu Tyr Cys Leu Phe Ala Glu 35 40 45

Cys Cys Gly Gln Lys Arg Ser Leu Ser Arg Glu Ala Leu Gln Lys Asp 50 55 60

Leu Asp Asp Asn Leu Phe Gly Gln His Leu Ala Lys Lys Ile Ile Leu 65 70 75 80

Asn Ala Val Phe Gly Phe Ile Asn Asn Pro Lys Pro Lys Pro Leu 85 90 95

Thr Leu Ser Leu His Gly Trp Thr Gly Thr Gly Lys Asn Phe Val Ser 100 105 110

Lys Ile Ile Ala Glu Asn Ile Tyr Glu Gly Gly Leu Asn Ser Asp Tyr
115 120 125

Val His Leu Phe Val Ala Thr Leu His Phe Pro His Ala Ser Asn Ile 130 135 140

Thr Leu Tyr Lys Asp Gln Leu Gln Leu Trp Ile Arg Gly Asn Val Ser 145 150 155 160

Ala Cys Ala Arg Ser Ile Phe Ile Phe Asp Glu Met Asp Lys Met His
165 170 175

Ala Gly Leu Ile Asp Ala Ile Lys Pro Phe Leu Asp Tyr Tyr Asp Leu 180 185

. Val Asp Gly Val Ser Tyr Gln Lys Ala Met Phe Ile Phe Leu Ser Asn 195 200 205

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Ala Gly Ala Glu Arg Ile Thr Asp Val Ala Leu Asp Phe Trp Arg Ser 210 215 215 220 220 210 Arg Glu Asp Ile Lys Leu Lys Asp Ile Glu His Ala Leu
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225 230 235 236 236 235

Ser Val Ser Val Phe Asn Asn Lys Asn Ser Gly Phe Trp His Ser Ser 245 250 255

Leu Ile Asp Arg Asn Leu Ile Asp Tyr Phe Val Pro Phe Leu Pro Leu 260 265 270

Glu Tyr Lys His Leu Lys Met Cys Ile Arg Val Glu Met Gln Ser Arg 275 280 285

Gly Tyr Glu Ile Asp Glu Asp Ile Val Ser Arg Val Ala Glu Glu Met 290 295 300

Thr Phe Phe Pro Lys Glu Glu Arg Val Phe Ser Asp Lys Gly Cys Lys 305 310 315 320

Thr Val Phe Thr Lys Leu Asp Tyr Tyr Tyr Asp Asp 325 330

<210> 468 <211> 48 <212> PRT <213> Homo sapiens

<400> 468

Met Val Val Phe Ser Phe Phe Lys Pro Val Leu Val Ile Arg Met Tyr 1 5 10 15

Leu Thr Val Leu Trp Asn Asn Cys Asp Tyr Ser Lys Val Ile Val Phe

Lys Asn Val Ile Tyr Thr Cys Tyr Ile His Phe Ser Pro Ser Lys Tyr 35 40 45

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<210> 469
<211> 548
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (220)
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- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 469
- Met Ala Lys Phe Met Thr Pro Val Ile Gln Asp Asn Pro Ser Gly Trp

 1 10 15
- Gly Pro Cys Ala Val Pro Glu Gln Phe Arg Asp Met Pro Tyr Gln Pro
 20 25 30
- Phe Ser Lys Gly Asp Arg Leu Gly Lys Val Ala Asp Trp Thr Gly Ala 35 40 45
- Thr Tyr Gln Asp Lys Arg Tyr Thr Asn Lys Tyr Ser Ser Gln Phe Gly 50 60
- Gly Gly Ser Gln Tyr Ala Tyr Phe His Glu Glu Asp Glu Ser Ser Phe
 65 70 75 80
- Gln Leu Val Asp Thr Ala Arg Thr Gln Lys Thr Ala Tyr Gln Arg Asn
 85 90 95
- Arg Met Arg Phe Ala Gln Arg Asn Leu Arg Arg Asp Lys Asp Arg Arg 100 105 110
- Asn Met Leu Gln Phe Asn Leu Gln Ile Leu Pro Lys Ser Ala Lys Gln 115 120 125
- Lys Glu Arg Glu Arg Ile Arg Leu Gln Lys Lys Phe Gln Lys Gln Phe 130 140
- Gly Val Arg Gln Lys Trp Asp Gln Lys Ser Gln Lys Pro Arg Asp Ser 145 150 155 160
- Ser Val Glu Val Arg Ser Asp Trp Glu Val Lys Glu Glu Met Asp Phe 165 170 175
- Pro Gln Leu Met Lys Met Arg Tyr Leu Glu Val Ser Glu Pro Gln Asp 180 185 190
- Ile Glu Cys Cys Gly Ala Leu Glu Tyr Tyr Asp Lys Ala Phe Asp Arg 195 200 205
- Ile Thr Thr Arg Ser Glu Lys Pro Leu Arg Xaa Xaa Lys Arg Ile Phe 210 215 220
- His Thr Val Thr Thr Thr Asp Asp Pro Val Ile Arg Lys Leu Ala Lys 225 230 235 240
- Thr Gln Gly Asn Val Phe Ala Thr Asp Ala Ile Leu Ala Thr Leu Met 245 250 255
- Ser Cys Thr Arg Ser Val Tyr Ser Trp Asp Ile Val Val Gln Arg Val
 260 265 270
- Gly Ser Lys Leu Phe Phe Asp Lys Arg Asp Asn Ser Asp Phe Asp Leu 275 280 285
- Leu Thr Val Ser Glu Thr Ala Asn Glu Pro Pro Gln Asp Glu Gly Asn

<220> <221> SITE

290 295 300 Ser Phe Asn Ser Pro Arg Asn Leu Ala Met Glu Ala Thr Tyr Ile Asn 315 His Asn Phe Ser Gln Gln Cys Leu Arg Met Gly Lys Glu Arg Tyr Asn 330 Phe Pro Asn Pro Asn Pro Phe Val Glu Asp Asp Met Asp Lys Asn Glu 340 345 Ile Ala Ser Val Ala Tyr Arg Tyr Arg Ser Gly Lys Leu Gly Asp Asp Ile Asp Leu Ile Val Arg Cys Glu His Asp Gly Val Met Thr Gly Ala 370 Asn Gly Glu Val Ser Phe Ile Asn Ile Lys Thr Leu Asn Glu Trp Asp Ser Arg His Cys Asn Gly Val Asp Trp Arg Gln Lys Leu Asp Ser Gln Arg Gly Ala Val Ile Ala Thr Glu Leu Lys Asn Asn Ser Tyr Lys Leu Ala Arg Trp Thr Cys Cys Ala Leu Leu Ala Gly Ser Glu Tyr Leu Lys Leu Gly Tyr Val Ser Arg Tyr His Val Lys Asp Ser Ser Arg His Val Ile Leu Gly Thr Gln Gln Phe Lys Pro Asn Glu Phe Ala Ser Gln Ile Asn Leu Ser Val Glu Asn Ala Trp Gly Ile Leu Arg Cys Val Ile Asp Ile Cys Met Lys Leu Glu Glu Gly Lys Tyr Leu Ile Leu Lys Asp Pro Asn Lys Gln Val Ile Arg Val Tyr Ser Leu Pro Asp Gly Thr Phe Ser Glu Glu Glu Thr 545 <210> 470 <211> 285 <212> PRT <213> Homo sapiens

- <222> (191)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (216)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (217)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 470
- Met Lys Leu His Pro Pro Pro Pro Ser Pro Val Thr Gln Asp His Arg

 1 10 15
- Ser Lys Ser Ser His Ser Asn Trp Met Pro Arg Met Gly Ala Cys Ser 20 25 30
- Met Ser Arg Thr Ser Ser Ser Gly Pro Pro Ser Leu Cys Lys Ser Thr 35 40 45
- Ser Gly Arg Ser Cys Thr Arg Pro His Cys Trp Pro Ser Leu Pro Ala
 50 55 60
- Trp Val Ser Val Phe Thr Arg Thr Asn Thr Gly Ser Trp Cys Tyr Pro 65 70 75 80
- Ala Trp Gly Gly Ala Phe Ser Arg Pro Trp Met Ser Ala Gln Ser Met
 85 90 95
- Cys Cys Ala Glu Arg Ser Val Leu Gln Val Ala Cys Arg Leu Leu Asp 100 105 110
- Ala Leu Glu Phe Leu His Glu Asn Glu Tyr Val His Gly Asn Val Thr 115 120 125
- Ala Glu Asn Ile Phe Val Asp Pro Glu Asp Gln Ser Gln Val Thr Leu 130 135 140
- Ala Gly Tyr Gly Phe Ala Phe Arg Tyr Cys Pro Ser Gly Lys His Val 145 150 155 160
- Ala Tyr Val Glu Gly Ser Arg Ser Pro His Glu Gly Asp Leu Glu Phe
 165 170 175
- Ile Ser Met Asp Leu His Lys Gly Cys Gly Pro Ser Arg Arg Xaa Asp 180 185 190
- Leu Gln Ser Leu Gly Tyr Cys Met Leu Lys Trp Leu Tyr Gly Phe Leu 195 200 205
- Pro Trp Thr Asn Cys Leu Pro Xaa Xaa Glu Asp Ile Met Lys Gln Lys 210 215 220
- Gln Lys Phe Val Asp Lys Pro Gly Pro Phe Val Gly Pro Cys Gly His 225 230 235 240

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Trp Ile Arg Pro Ser Glu Thr Leu Gln Lys Tyr Leu Lys Val Val Met 245 250 255
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Ala Leu Thr Tyr Glu Glu Lys Pro Pro Tyr Ala Met Leu Arg Asn Asn 260 265 270

Leu Glu Ala Leu Leu Gln Asp Leu Arg Val Ser Pro Tyr 275 280 280

<210> 471

<211> 80

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (80)

<223> Xaa equals stop translation

<400> 471

Met Thr Ser Pro Pro Pro His Gln Gly Trp Glu Gln Arg Gly Cys Gly
1 10 15

Glu Ser Gln Val Pro Leu Ala Leu Ser Arg Val Phe Ser Thr Ser His

Tyr Cys Leu Leu Leu Val Ala Asn Gln Ser Ile Phe Phe Pro Cys Leu 35 40 45

Trp Ala Val Glu Arg Leu Leu Gly Val Arg Cys Thr Cys Pro Leu Ser 50 55 60

Trp Gly Lys Arg Ile Ile Ser Glu His Cys Ser Ala Gln Ser Ser Xaa 65 70 75 80

<210> 472

<211> 47

<212> PRT

<213> Homo sapiens

<400> 472

Met His Thr Trp Tyr Asn Asp Arg Gln Asn Cys His Cys Leu Leu 1 5 10 15

Phe Phe Leu Ile Tyr Leu Arg Lys Ile Tyr Gln Val Val Pro His Val 20 25 30

Pro Leu Leu Val Lys Cys Arg Gly Arg Leu Lys Gly Val Asn Ile 35 40 45

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<211> 96
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (96)
 <223> Xaa equals stop translation
 <400> 473
 Met Glu Leu Val Leu Val Phe Leu Cys Ser Leu Leu Ala Pro Met Val
 Leu Ala Ser Ala Ala Glu Lys Glu Lys Glu Met Asp Pro Phe His Tyr
 Asp Tyr Gln Thr Leu Arg Ile Gly Gly Leu Val Phe Ala Val Val Leu
 Phe Ser Val Gly Ile Leu Leu Ile Leu Ser Arg Arg Cys Lys Cys Ser
 Phe Asn Gln Lys Pro Arg Ala Pro Gly Asp Glu Glu Ala Gln Val Glu
Asn Leu Ile Thr Ala Asn Ala Thr Glu Pro Gln Lys Ala Glu Asn Xaa
<210> 474
<211> 399
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (399)
<223> Xaa equals stop translation
<400> 474
Met Ala Ser Gly Ala Asp Ser Lys Gly Asp Asp Leu Ser Thr Ala Ile
Leu Lys Gln Lys Asn Arg Pro Asn Arg Leu Ile Val Asp Glu Ala Ile
                                  25
Asn Glu Asp Asn Ser Val Val Ser Leu Ser Gln Pro Lys Met Asp Glu
         35
Leu Gln Leu Phe Arg Gly Asp Thr Val Leu Leu Lys Gly Lys Lys Arg
Arg Glu Ala Val Cys Ile Val Leu Ser Asp Asp Thr Cys Ser Asp Glu
                     70
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- Lys Ile Arg Met Asn Arg Val Val Arg Asn Asn Leu Arg Val Arg Leu
 85 90 95
- Gly Asp Val Ile Ser Ile Gln Pro Cys Pro Asp Val Lys Tyr Gly Lys
 100 105 110
- Arg Ile His Val Leu Pro Ile Asp Asp Thr Val Glu Gly Ile Thr Gly
 115 120 125
- Asn Leu Phe Glu Val Tyr Leu Lys Pro Tyr Phe Leu Glu Ala Tyr Arg 130 135 140
- Pro Ile Arg Lys Gly Asp Ile Phe Leu Val Arg Gly Gly Met Arg Ala 145 150 155 160
- Val Glu Phe Lys Val Val Glu Thr Asp Pro Ser Pro Tyr Cys Ile Val
 165 170 175
- Ala Pro Asp Thr Val Ile His Cys Glu Gly Glu Pro Ile Lys Arg Glu
 180 185 190
- Asp Glu Glu Glu Ser Leu Asn Glu Val Gly Tyr Asp Asp Ile Gly Gly
 195 200 205
- Cys Arg Lys Gln Leu Ala Gln Ile Lys Glu Met Val Glu Leu Pro Leu 210 215 220
- Arg His Pro Ala Leu Phe Lys Ala Ile Gly Val Lys Pro Pro Arg Gly 225 230 235 240
- Ile Leu Leu Tyr Gly Pro Pro Gly Thr Gly Lys Thr Leu Ile Ala Arg 245 250 255
- Ala Val Ala Asn Glu Thr Gly Ala Phe Phe Phe Leu Ile Asn Gly Pro 260 265 270
- Glu Ile Met Ser Lys Leu Ala Gly Glu Ser Glu Ser Asn Leu Arg Lys 275 280 285
- Ala Phe Glu Glu Ala Glu Lys Asn Ala Pro Ala Ile Ile Phe Ile Asp 290 295 300
- Glu Leu Asp Ala Ile Ala Pro Lys Arg Glu Lys Thr His Gly Glu Val 305 310 315 320
- Glu Arg Arg Ile Val Ser Gln Leu Leu Thr Leu Met Asp Gly Leu Lys 325 330 335
- Gln Arg Ala His Val Ile Val Met Ala Ala Thr Asn Arg Pro Asn Ser 340 345 350
- Ile Asp Pro Ala Leu Arg Arg Phe Gly Arg Phe Asp Arg Glu Val Asp 355 360 365
- Ile Gly Ile Pro Asp Ala Thr Gly Arg Leu Glu Ile Leu Gln Ile His 370 375 380
- Thr Lys Asn Met Lys Leu Ala Asp Asp Val Asp Leu Glu Gln Xaa

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385
                    390
                                         395
<210> 475
<211> 45
<212> PRT
<213> Homo sapiens
<400> 475
Met Tyr Met Lys Thr Asn Leu Ser Leu Val Ser Leu Lys Tyr Leu Phe
Phe Leu Thr Cys Glu Met Phe Glu Arg Arg Phe Ser Ile His Phe Ser
             20
Ala Ala Trp Arg Lys Leu Gly Asn Asp Phe Phe Gln Leu
<210> 476
<211> 273
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (181)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (203)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (204)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (211)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>

<221> SITE

<222> (273)

<223> Xaa equals stop translation

<400> 476

Met Ala Ala Pro Lys Gly Ser Leu Trp Val Arg Thr Gln Leu Gly Leu 1 5 10 15

Pro Pro Leu Leu Leu Thr Met Ala Leu Ala Gly Gly Ser Gly Thr 20 25 30

Ala Ser Ala Glu Ala Phe Asp Ser Val Leu Gly Asp Thr Ala Ser Cys 35 40 45

His Arg Ala Cys Gln Leu Thr Tyr Pro Leu His Thr Tyr Pro Lys Glu 50 60

Glu Glu Leu Tyr Ala Cys Gln Arg Gly Cys Arg Leu Phe Ser Ile Cys 65 70 75 80

Gln Phe Val Asp Asp Gly Ile Asp Leu Asn Arg Thr Lys Leu Glu Cys
85 90 95

Glu Ser Ala Cys Thr Glu Ala Tyr Ser Gln Ser Asp Glu Gln Tyr Ala 100 105 110

Cys His Leu Gly Cys Gln Asn Gln Leu Pro Phe Ala Glu Leu Arg Gln 115 120 125

Glu Gln Leu Met Ser Leu Met Pro Lys, Met His Leu Leu Phe Pro Leu 130 135 140

Thr Leu Val Arg Ser Phe Trp Ser Asp Met Met Asp Ser Ala Gln Ser 145 150 155 160

Phe Ile Thr Ser Ser Trp Thr Phe Tyr Leu Gln Ala Asp Asp Gly Lys 165 170 175

Ile Val Ile Phe Xaa Ser Lys Pro Arg Asn Pro Arg Tyr Ala Pro His 180 185 190

Leu Glu Pro Gly Ala Leu Pro Asn Leu Xaa Xaa Xaa Ser Leu Ser Lys 195 200 205

Met Ser Kaa Kaa Ser Kaa Met Arg Asn Ser Gln Ala His Arg Asn Phe 210 215 220

Leu Glu Asp Gly Glu Ser Asp Gly Phe Leu Arg Cys Leu Ser Leu Asn 225 230 235 240

Ser Gly Trp Ile Leu Thr Thr Thr Leu Val Leu Ser Val Met Val Leu 245 250 255

Leu Trp Ile Cys Cys Ala Thr Cys Cys Tyr Thr Leu Leu Asp Ala Val 260 265 270

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Xaa
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<210> 477
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<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 477

Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe Ser 1 5 10 15

Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr Pro 20 25 30

Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile Ala 35 40 45

Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val Gly 50 55 60

Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu Ser 65 70 75 80

Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu Asp 85 90 95

Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His Asp 100 105 110

Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala Gly
115 120 125

Xaa Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu Ala 130 135 140

Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe Pro 145 150 155 160

Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly Met 165 170 175

Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr Ser 180 185 190

<210> 478

<211> 234

<212> PRT

<213 > Homo sapiens

<400> 478

Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser 1 5 10 15

Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys
20 25 30

Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe 35 40 45

Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro 50 55 60

Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val 65 70 75 80

Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu 85 90 95

Arg Val Arg Met Val Asn Leu Gln Val Glu Asp Ser Gly Leu Tyr Gln
100 105 110

Cys Val Ile Tyr Gln Pro Pro Lys Glu Pro His Met Leu Phe Asp Arg 115 120 125

Ile Arg Leu Val Val Thr Lys Gly Phe Ser Gly Thr Pro Gly Ser Asn 130 135 140

Glu Asn Ser Thr Gln Asn Val Tyr Lys Ile Pro Pro Thr Thr Lys 145 150 155 160

Ala Leu Cys Pro Leu Tyr Thr Ser Pro Arg Thr Val Thr Gln Ala Pro 165 170 175

Pro Lys Ser Thr Ala Asp Val Ser Thr Pro Asp Ser Glu Ile Asn Leu 180 185 190

Thr Asn Val Thr Asp Ile Ile Arg Val Pro Val Phe Asn Ile Val Ile 195 200 205

Leu Leu Ala Gly Gly Phe Leu Ser Lys Ser Leu Val Phe Ser Val Leu 210 215 220

Phe Ala Val Thr Leu Arg Ser Phe Val Pro 225

<210> 479

<211> 105

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (105)

<223> Xaa equals stop translation

<400> 479

```
Met Leu His Ile Leu Pro Leu Lys Ser Tyr Asp Phe Pro His Phe Ser
                                     10
Leu Met Gly Arg Tyr Arg Cys Ala Ser Leu Leu Phe Cys Phe Leu Leu
Leu Phe Phe Phe Cys Ser Val Leu Trp Thr Phe Ser Asp Met His
Arg Ser Gly Glu Asp Gly Pro Trp Thr Pro Cys Val His His Leu Ala
Ala Ser Leu Ile Ser Tyr Gly Gln Pro Gly Phe Ile Cys Ile Ser Leu
Phe Ser Pro Val Leu Phe Ile Glu Asn Pro Arg His Tyr Ala Asn Ala
Thr Val Thr Thr Leu Gly Asp Trp Xaa
           100
<210> 480
<211> 32
<212> PRT
<213> Homo sapiens
<400> 480
Met Val Phe Leu Lys Tyr Arg Phe Leu Phe Phe Leu Val Phe Leu Ala
                                     10
Asn Cys Ile Tyr Ser Leu His Tyr Lys Pro Ser Leu Met Tyr Pro Lys
             20
<210> 481
<211> 571
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (556)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (571)
<223> Xaa equals stop translation
<400> 481
Met Ala Leu Ser Arg Gly Leu Pro Arg Glu Leu Ala Glu Ala Val Ala
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- Gly Gly Arg Val Leu Val Val Gly Ala Gly Gly Ile Gly Cys Glu Leu 20 25 30
- Leu Lys Asn Leu Val Leu Thr Gly Phe Ser His Ile Asp Leu Ile Asp 35 40 45
- Leu Asp Thr Ile Asp Val Ser Asn Leu Asn Arg Gln Phe Leu Phe Gln 50 55 60
- Lys Lys His Val Gly Arg Ser Lys Ala Gln Val Ala Lys Glu Ser Val 65 70 75 80
- Leu Gln Phe Tyr Pro Lys Ala Asn Ile Val Ala Tyr His Asp Ser Ile 85 90 95
- Met Asn Pro Asp Tyr Asn Val Glu Phe Phe Arg Gln Phe Ile Leu Val
- Met Asn Ala Leu Asp Asn Arg Ala Ala Arg Asn His Val Asn Arg Met
 115 120 125
- Cys Leu Ala Ala Asp Val Pro Leu Ile Glu Ser Gly Thr Ala Gly Tyr 130 135 140
- Leu Gly Gln Val Thr Thr Ile Lys Lys Gly Val Thr Glu Cys Tyr Glu 145 150 155 160
- Cys His Pro Lys Pro Thr Gln Arg Thr Phe Pro Gly Cys Thr Ile Arg 165 170 175
- Asn Thr Pro Ser Glu Pro Ile His Cys Ile Val Trp Ala Lys Tyr Leu 180 185 190
- Phe Asn Gln Leu Phe Gly Glu Glu Asp Ala Asp Gln Glu Val Ser Pro 195 200 205
- Asp Arg Ala Asp Pro Glu Ala Ala Trp Glu Pro Thr Glu Ala Glu Ala 210 215 220
- Arg Ala Arg Ala Ser Asn Glu Asp Gly Asp Ile Lys Arg Ile Ser Thr 225 230 235 240
- Lys Glu Trp Ala Lys Ser Thr Gly Tyr Asp Pro Val Lys Leu Phe Thr 245 250 255
- Lys Leu Phe Lys Asp Asp Ile Arg Tyr Leu Leu Thr Met Asp Lys Leu 260 265 270
- Trp Arg Lys Arg Lys Pro Pro Val Pro Leu Asp Trp Ala Glu Val Gln 275 280 285
- Ser Gln Gly Glu Glu Thr Asn Ala Ser Asp Gln Gln Asn Glu Pro Gln 290 295 300
- Leu Gly Leu Lys Asp Gln Gln Val Leu Asp Val Lys Ser Tyr Ala Arg 305 310 315 320

Leu Phe Ser Lys Ser Ile Glu Thr Leu Arg Val His Leu Ala Glu Lys 325 330 335

Gly Asp Gly Ala Glu Leu Ile Trp Asp Lys Asp Asp Pro Ser Ala Met 340 345 350

Asp Phe Val Thr Ser Ala Ala Asn Leu Arg Met His Ile Phe Ser Met 355 360 365

Asn Met Lys Ser Arg Phe Asp Ile Lys Ser Met Ala Gly Asn Ile Ile 370 375 380

Pro Ala Ile Ala Thr Thr Asn Ala Val Ile Ala Gly Leu Ile Val Leu 385 390 395 400

Glu Gly Leu Lys Ile Leu Ser Gly Lys Ile Asp Gln Cys Arg Thr Ile
405 410 415

Phe Leu Asn Lys Gln Pro Asn Pro Arg Lys Lys Leu Leu Val Pro Cys 420 425 430

Ala Leu Asp Pro Pro Asn Pro Asn Cys Tyr Val Cys Ala Ser Lys Pro
435 440 445

Glu Val Thr Val Arg Leu Asn Val His Lys Val Thr Val Leu Thr Leu 450 455 460

Gln Asp Lys Ile Val Lys Glu Lys Phe Ala Met Val Ala Pro Asp Val 465 470 475 480

Gln Ile Glu Asp Gly Lys Gly Thr Ile Leu Ile Ser Ser Glu Glu Gly
485 490 495

Glu Thr Glu Ala Asn Asn His Lys Lys Leu Ser Glu Phe Gly Ile Arg 500 505 510

Asn Gly Ser Arg Leu Gln Ala Asp Asp Phe Leu Gln Asp Tyr Thr Leu 515 520 525

Leu Ile Asn Ile Leu His Ser Glu Asp Leu Gly Lys Asp Val Glu Phe 530 540

Glu Val Val Gly Asp Ala Pro Glu Lys Val Gly Xaa Lys Gln Ala Glu 545 550 555 560

Asp Ala Ala Lys Ser Ile Thr Asn Gly Gln Xaa 565

<210> 482

<211> 312

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (312)

<223> Xaa equals stop translation

<400> 482

Met Gln Val Val Thr Cys Leu Thr Arg Asp Ser Tyr Leu Thr His Cys

1 10 15

Phe Leu Gln His Leu Met Val Val Leu Ser Ser Leu Glu Arg Thr Pro 20 25 30

Ser Pro Glu Pro Val Asp Lys Asp Phe Tyr Ser Glu Phe Gly Asn Lys 35 40 45

Thr Thr Gly Lys Met Glu Asn Tyr Glu Leu Ile His Ser Ser Arg Val
50 55 60

Lys Phe Thr Tyr Pro Ser Glu Glu Glu Ile Gly Asp Leu Thr Phe Thr 65 70 75 80

Val Ala Gln Lys Met Ala Glu Pro Glu Lys Ala Pro Ala Leu Ser Ile 85 90 95

Leu Leu Tyr Val Gln Ala Phe Gln Val Gly Met Pro Pro Gly Cys
100 105 110

Cys Arg Gly Pro Leu Arg Pro Lys Thr Leu Leu Thr Ser Ser Glu
115 120 125

Ile Phe Leu Leu Asp Glu Asp Cys Val His Tyr Pro Leu Pro Glu Phe 130 135 140

Ala Lys Glu Pro Pro Gln Arg Asp Arg Tyr Arg Leu Asp Asp Gly Arg 145 150 155 160

Arg Val Arg Asp Leu Asp Arg Val Leu Met Gly Tyr Gln Thr Tyr Pro 165 170 175

Gln Pro Ser Pro Ser Ser Ser Met Thr Cys Lys Val Met Thr Ser Trp
180 185 190

Ala Val Ser Pro Trp Thr Thr Leu Gly Arg Cys Gln Val Ala Arg Leu 195 200 205

Glu Pro Ala Arg Ala Val Lys Ser Ser Gly Arg Cys Leu Ser Pro Val 210 220.

Leu Arg Ala Glu Arg Ser Ser Ser Arg Cys Trp Leu Ala Ser Gly Arg 225 230 235 240

Pro Cys Val Ala Val Ser Cys Leu Ser Ser Ser Pro Ala Ser Pro Gly
245 250 255

His Ser Gln Pro Val Val Ser Ser Leu Thr Pro Thr Gly Ala Gly Gln 260 265 270

Gln Ala Phe Val Phe Ser Lys Asn Val Leu Ser Ser Leu Trp Tyr Leu 275 280 285

Asn Leu Thr Val Leu Ala Glu Asn Val Asn Met Cys Val Cys Cys Val 290 295 300 Asn Ser Phe Ser Cys Trp Glu Xaa 305 310

<210> 483

<211> 329

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (329)

<223> Xaa equals stop translation

<400> 483

Met Ala Gln His His Leu Trp Ile Leu Leu Cys Leu Gln Thr Trp 1 5 10 15

Pro Glu Ala Ala Gly Lys Asp Ser Glu Ile Phe Thr Val Asn Gly Ile 20 25 30

Leu Gly Glu Ser Val Thr Phe Pro Val Asn Ile Gln Glu Pro Arg Gln
35 40 45

Val Lys Ile Ile Ala Trp Thr Ser Lys Thr Ser Val Ala Tyr Val Thr
50 60

Pro Gly Asp Ser Glu Thr Ala Pro Val Val Thr Val Thr His Arg Asn 65 70 75 80

Tyr Tyr Glu Arg Ile His Ala Leu Gly Pro Asn Tyr Asn Leu Val Ile 85 90 95

Ser Asp Leu Arg Met Glu Asp Ala Gly Asp Tyr Lys Ala Asp Ile Asn 100 \$105\$. \$110

Thr Gln Ala Asp Pro Tyr Thr Thr Thr Lys Arg Tyr Asn Leu Gln Ile 115 120 125

Tyr Arg Arg Leu Gly Lys Pro Lys Ile Thr Gln Ser Leu Met Ala Ser 130 135 140

Val Asn Ser Thr Cys Asn Val Thr Leu Thr Cys Ser Val Glu Lys Glu 145 150 155 160

Glu Lys Asn Val Thr Tyr Asn Trp Ser Pro Leu Gly Glu Glu Gly Asn 165 170 175

Val Leu Gln Ile Phe Gln Thr Pro Glu Asp Gln Glu Leu Thr Tyr Thr 180 185 190

Cys Thr Ala Gln Asn Pro Val Ser Asn Asn Ser Asp Ser Ile Ser Ala 195 200 205

Arg Gln Leu Cys Ala Asp Ile Ala Met Gly Phe Arg Thr His His Thr 210 215 220

Gly Leu Leu Ser Val Leu Ala Met Phe Phe Leu Leu Val Leu Ile Leu 225 230 235 240

Ser Ser Val Phe Leu Phe Arg Leu Phe Lys Arg Arg Gln Asp Ala Ala 245 250 255

Ser Lys Lys Thr Ile Tyr Thr Tyr Ile Met Ala Ser Arg Asn Thr Gln 260 265 270

Pro Ala Glu Ser Arg Ile Tyr Asp Glu Ile Leu Gln Ser Lys Val Leu 275 280 285

Pro Ser Lys Glu Glu Pro Val Asn Thr Val Tyr Ser Glu Val Gln Phe 290 295 300

Ala Asp Lys Met Gly Lys Ala Ser Thr Gln Asp Ser Lys Pro Pro Gly 305 310 315

Thr Ser Ser Tyr Glu Ile Val Ile Xaa 325

<210> 484

<211> 178

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (178)

<223> Xaa equals stop translation

<400> 484

Met Lys Leu Gln Cys Val Ser Leu Trp Leu Leu Gly Thr Ile Leu Ile 1 5 10 15

Leu Cys Ser Val Asp Asn His Gly Leu Arg Arg Cys Leu Ile Ser Thr
-20 25 30

Asp Met His His Ile Glu Glu Ser Phe Gln Glu Ile Lys Arg Ala Ile 35 40 45

Gln Ala Lys Asp Thr Phe Pro Asn Val Thr Ile Leu Ser Thr Leu Glu
50 60

Thr Leu Gln Ile Ile Lys Pro Leu Asp Val Cys Cys Val Thr Lys Asn 65 70 75 80

Leu Leu Ala Phe Tyr Val Asp Arg Val Phe Lys Asp His Gln Glu Pro 85 90 95

Asn Pro Lys Ile Leu Arg Lys Ile Ser Ser Ile Ala Asn Ser Phe Leu 100 105 110

Tyr Met Gln Lys Thr Leu Arg Gln Cys Gln Glu Gln Arg Gln Cys His 115 120 125

Cys Arg Gln Glu Ala Thr Asn Ala Thr Arg Val Ile His Asp Asn Tyr

```
130
                        135
                                             140
Asp Gln Leu Glu Val His Ala Ala Ala Ile Lys Ser Leu Gly Glu Leu
                    150
145
Asp Val Phe Leu Ala Trp Ile Asn Lys Asn His Glu Val Met Ser Ser
                                    170
                165
Ala Xaa
<210> 485
<211> 238
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 485
Met Gly Arg Pro Leu Leu Pro Leu Leu Xaa Leu Leu Xaa Pro Pro
                                     10
Ala Phe Leu Gln Pro Xaa Gly Ser Thr Gly Ser Gly Pro Ser Tyr Leu
Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly Gly Ser
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Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala Xaa Xaa

	50					55					60				
Pro 65	Xaa	Val	Arg	Ile	Ser 70	Trp	Arg	Arg	Gly	His 75	Phe	His	Gly	Gln	Ser 80
Phe	Tyr	Ser	Thr	Arg 85	Pro	Pro	Ser	Ile	His 90	Lys	Asp	Tyr	Val	Asn 95	Arg
Leu	Phe	Leu	Asn 100	Trp	Thr	Glu	Gly	Gln 105	Glu	Ser	Gly	Phe	Leu 110	Arg	Ile
Ser	Asn	Leu 115	Arg	Lys	Glu	Asp	Gln 120	Ser	Val	Tyr	Phe	Cys 125	Arg	Val	Glu
Leu	Asp 130	Thr	Arg	Arg	Ser	Gly 135	Arg	Gln	Gln	Leu	Gln 140	Ser	Ile	Lys	Gly
Thr 145	Lys	Leu	Thr	Ile	Thr 150	Gln	Ala	Val	Thr	Thr 155	Thr	Thr	Thr	Trp	Arg 160
Pro	Ser	Ser	Thr	Thr 165	Thr	Ile	Ala	Gly	Leu 170	Arg	Val	Thr	Glu	Ser 175	Lys
Gly	His	Ser	Glu 180	Ser	Trp	His	Leu	Ser 185	Leu	Asp	Thr	Ala	Ile 190	Arg	Val
Ala	Leu	Ala 195	Val	Ala	Val	Leu	Lys 200	Thr	Val	Ile	Leu	Gly 205	Leu	Leu	Cys
Leu	Leu 210	Leu	Cys	Gly	Gly	Gly 215	Glu	Gly	Lys	Val	Ala 220	Gly	Arg	Gln	Ala
Val 225	Thr	Ser	Asp	Gln	Gln 230	Ser	Val	Gly	Arg	Arg 235	Asp	Val	Tyr		
<210> 486 <211> 62 <212> PRT <213> Homo sapiens															
	0> 48 Gln		Lys	Asn	Ser	Leu	Phe	Phe	Phe	Phe	Ala	Phe	Tyr	Tyr	Glu
1	_	_,	_	5	_	6 7	~ 3	~ 3	10			1	_	15	 -
Asn	Lys	Thr	Asn 20	Ala	Pro	Gly	Glu	Gly 25	Ser	Met	Ile	Thr	Arg 30	Asn	Ile
Lys	Glu	Tyr 35	Phe	Leu	Pro	Phe	Leu 40	Phe	Cys	Cys	Val	Glu 45	Ala	Ser	Ile

<210> 487 <211> 27 <212> PRT

```
<213> Homo sapiens
  <400> 487
  Met Pro Gly Leu Ser Leu Ile Leu Thr Val Thr Leu Leu Ala Val Ser
                                        10
  Asp Ser Ala Ala Thr Cys Ile Val Ala Lys Gly
  <210> 488
  <211> 339
  <212> PRT
  <213> Homo sapiens
  <220>
  <221> SITE
  <222> (142)
  <223> Xaa equals any of the naturally occurring L-amino acids
  <220>
  <221> SITE
  <222> (330)
  <223> Xaa equals any of the naturally occurring L-amino acids
  <220>
  <221> SITE
  <222> (335)
  <223> Xaa equals any of the naturally occurring L-amino acids
<220>
  <221> SITE
  <222> (336)
  <223> Xaa equals any of the naturally occurring L-amino acids
  <220>
  <221> SITE
  <222> (339)
  <223> Xaa equals stop translation
  <400> 488
  Met Ser Gly Pro Asp Val Glu Thr Pro Ser Ala Ile Gln Ile Cys Arg
  Ile Met Arg Pro Asp Asp Ala Asn Val Ala Gly Asn Val His Gly Gly
  Thr Ile Leu Lys Met Ile Glu Glu Ala Gly Ala Ile Ile Ser Thr Arg
  His Cys Asn Ser Gln Asn Gly Glu Arg Cys Val Ala Ala Leu Ala Arg
  Val Glu Arg Thr Asp Phe Leu Ser Pro Met Cys Ile Gly Glu Val Ala
  His Val Ser Ala Glu Ile Thr Tyr Thr Ser Lys His Ser Val Glu Val
```

Gln Val Asn Val Met Ser Glu Asn Ile Leu Thr Gly Ala Lys Leu 100 105 110

Thr Asn Lys Ala Thr Leu Trp Tyr Val Pro Leu Ser Leu Lys Asn Val

Asp Lys Val Leu Glu Val Pro Pro Val Val Tyr Ser Arg Xaa Glu Gln
130 140

Glu Glu Glu Gly Arg Lys Arg Tyr Glu Ala Gln Lys Leu Glu Arg Met 145 150 155 160

Glu Thr Lys Trp Arg Asn Gly Asp Ile Val Gln Pro Val Leu Asn Pro 165 170 175

Glu Pro Asn Thr Val Ser Tyr Ser Gln Ser Ser Leu Ile His Leu Val 180 185 190

Gly Pro Ser Asp Cys Thr Leu His Gly Phe Val His Gly Gly Val Thr
195 200 205

Met Lys Leu Met Asp Glu Val Ala Gly Ile Val Ala Arg His Cys 210 215 220

Lys Thr Asn Ile Val Thr Ala Ser Val Asp Ala Ile Asn Phe His Asp 225 230 235 240

Lys Ile Arg Lys Gly Cys Val Ile Thr Ile Ser Gly Arg Met Thr Phe \$245\$ \$250\$ \$255\$

Thr Ser Asn Lys Ser Met Glu Ile Glu Val Leu Val Asp Ala Asp Pro 260 265 270

Val Val Asp Ser Ser Gln Lys Arg Tyr Arg Ala Ala Ser Ala Phe Phe 275 280 285

Thr Tyr Val Ser Leu Ser Gln Glu Gly Arg Ser Leu Pro Val Pro Gln 290 295 300

Leu Val Pro Glu Thr Glu Asp Glu Lys Lys Arg Phe Glu Glu Gly Lys 305 310 315 320

Gly Arg Tyr Leu Gln Met Lys Ala Lys Xaa Gln Gly His Ala Xaa Xaa 325 330 335

Gln Pro Xaa

<210> 489

<211> 32

<212> PRT

<213> Homo sapiens

<400> 489

Met Leu Asn Ser Asn Ile Asn Asp Leu Leu Met Val Thr Tyr Leu Ala 1 5 10 15

```
Asn Leu Thr Gln Ser Gln Ile Ala Leu Asn Glu Lys Leu Val Asn Leu
           20
                                 25
<210> 490
<211> 48
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation
Met Arg Glu Thr Ser Ile Arg Val Leu Leu Met Leu Pro Ala Leu Glu
Ser Thr Ser Gly Leu Ser Ala Phe Met Gly Leu Gly Thr Arg Ile Gly
Cys Phe Lys Thr Ile Thr Cys Trp Pro Thr Ser Leu Thr Gln Arg Xaa
<210> 491
<211> 38
<212> PRT
<213> Homo sapiens
<400> 491
Met Tyr Met Tyr Ser Leu Asn Val Phe Leu Ser Phe Ile Phe Leu Ala
Leu Val Phe Lys Cys Val His Val Cys Gln Gly Ala Asn Ala Phe Leu
Phe Leu Lys Leu Val Phe
       35
<210> 492
<211> 61
<212> PRT
<213> Homo sapiens
<400> 492
Met Gly Leu Arg Leu Ile Cys Leu Glu Leu Thr Met Val Lys Ala Leu
```

Val Cys Glu Met Phe Leu Phe Phe Leu Met Thr Gln Lys Leu Ile Trp

25

Gln Glu Cys Thr Glu Lys Phe Ala Lys Leu Leu Val Gln Leu Ile Ser

Leu Val Phe Ala Trp Glu Phe Phe Ser Glu Asp Thr Pro 50 55 60

<210> 493

<211> 346

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (346)

<223> Xaa equals stop translation

<400> 493

Met Leu Ala Ala Arg Leu Val Cys Leu Arg Thr Leu Pro Ser Arg Val
1 5 10 15

Phe His Pro Ala Phe Thr Lys Ala Ser Pro Val Val Lys Asn Ser Ile
20 25 30

Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser Arg Glu Tyr Ala Thr Lys
35 40 45

Thr Arg Ile Gly Ile Arg Arg Gly Arg Thr Gly Gln Glu Leu Lys Glu
50 55 60

Ala Ala Leu Glu Pro Ser Met Glu Lys Ile Phe Lys Ile Asp Gln Met 65 70 75 80

Gly Arg Trp Phe Val Ala Gly Gly Ala Ala Val Gly Leu Gly Ala Leu
85 90 95

Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu Ile Gly Ala Ile Glu Lys
100 105 110

Ala Val Ile Trp Pro Gln Tyr Val Lys Asp Arg Ile His Ser Thr Tyr
115 120 125

Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr Ala Leu Ser Ala Ile Ala 130 135 140

Ile Ser Arg Thr Pro Val Leu Met Asn Phe Met Met Arg Gly Ser Trp 145 150 150 155

Val Thr Ile Gly Val Thr Phe Ala Ala Met Val Gly Ala Gly Met Leu 165 170 175

Val Arg Ser Ile Pro Tyr Asp Gln Ser Pro Gly Pro Lys His Leu Ala 180 185 190

Trp Leu Leu His Ser Gly Val Met Gly Ala Val Val Ala Pro Leu Thr
195 200 205

Ile Leu Gly Gly Pro Leu Leu Ile Arg Ala Ala Trp Tyr Thr Ala Gly
210 215 220

Ile Val Gly Gly Leu Ser Thr Val Ala Met Cys Ala Pro Ser Glu Lys
225 230 235 240

Phe Leu Asn Met Gly Ala Pro Leu Gly Val Gly Leu Gly Leu Val Phe 245 250 255

Val Ser Ser Leu Gly Ser Met Phe Leu Pro Pro Thr Thr Val Ala Gly 260 265 270

Ala Thr Leu Tyr Ser Val Ala Met Tyr Gly Gly Leu Val Leu Phe Ser 275 280 285

Met Phe Leu Leu Tyr Asp Thr Gln Lys Val Ile Lys Arg Ala Glu Val 290 295 300

Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp Pro Ile Asn Ser Met Leu 305 310 315 320

Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe Met Arg Val Ala Thr Met 325 330 335

Leu Ala Thr Gly Gly Asn Arg Lys Lys Xaa 340 345

<210> 494

<211> 237

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (237)

<223> Xaa equals stop translation

<400> 494

Met Glu Glu Val Leu Leu Gly Leu Lys Asp Arg Glu Gly Tyr Thr
1 5 10 15

Ser Phe Trp Asn Asp Cys Ile Ser Ser Gly Leu Arg Gly Cys Met Leu 20 25 30

Ile Glu Leu Ala Leu Arg Gly Arg Leu Gln Leu Glu Ala Cys Gly Met
35 40 45

Arg Arg Lys Ser Leu Leu Thr Arg Lys Val Ile Cys Lys Ser Asp Ala 50 55 60

Pro Thr Gly Asp Val Leu Leu Asp Glu Ala Leu Lys His Val Lys Glu 65 70 75 80

Thr Gln Pro Pro Glu Thr Val Gln Asn Trp Ile Glu Leu Leu Ser Gly 85 90 95

Glu Thr Trp Asn Pro Leu Lys Leu His Tyr Gln Leu Arg Asn Val Arg

Glu Arg Leu Ala Lys Asn Leu Val Glu Lys Gly Val Leu Thr Thr Glu
115 120 125

Lys Gln Asn Phe Leu Leu Phe Asp Met Thr Thr His Pro Leu Thr Asn 130 135 140

Asn Asn Ile Lys Gln Arg Leu Ile Lys Lys Val Gln Glu Ala Val Leu 145 150 155 160

Asp Lys Trp Val Asn Asp Pro His Arg Met Asp Arg Arg Leu Leu Ala 165 170 175

Leu Ile Tyr Leu Ala His Ala Ser Asp Val Leu Glu Asn Ala Phe Ala 180 185 190

Pro Leu Leu Asp Glu Gln Tyr Asp Leu Ala Thr Lys Arg Val Arg Gln
195 200 205

Leu Leu Asp Leu Asp Pro Glu Val Glu Cys Leu Lys Ala Asn Thr Asn 210 220

Glu Val Leu Trp Ala Val Val Ala Ala Phe Thr Lys Xaa 225 230 235

<210> 495

<211> 200

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (200)

<223> Xaa equals stop translation

<400> 495

Met Ala Gln Arg Met Val Trp Val Asp Leu Glu Met Thr Gly Leu Asp 1 5 10 15

Ile Glu Lys Asp Gln Ile Ile Glu Met Ala Cys Leu Ile Thr Asp Ser 20 25 30

Asp Leu Asn Ile Leu Ala Glu Gly Pro Asn Leu Ile Ile Lys Gln Pro 35 40 45

Asp Glu Leu Leu Asp Ser Met Ser Asp Trp Cys Lys Glu His His Gly 50 55 60

Lys Ser Gly Leu Thr Lys Ala Val Lys Glu Ser Thr Ile Thr Leu Gln 65 70 75 80

Gln Ala Glu Tyr Glu Phe Leu Ser Phe Val Arg Gln Gln Thr Pro Pro 85 90 95

Gly Leu Cys Pro Leu Ala Gly Asn Ser Val His Glu Asp Lys Lys Phe

100 105 110 Leu Asp Lys Tyr Met Pro Gln Phe Met Lys His Leu His Tyr Arg Ile 115 120 Ile Asp Val Ser Thr Val Lys Glu Leu Cys Arg Arg Trp Tyr Pro Glu 135 Glu Tyr Glu Phe Ala Pro Lys Lys Ala Ala Ser His Arg Ala Leu Asp 150 Asp Ile Ser Glu Ser Ile Lys Glu Leu Gln Phe Tyr Arg Asn Asn Ile Phe Lys Lys Lys Ile Asp Glu Lys Lys Arg Lys Ile Ile Glu Asn Gly Glu Asn Glu Lys Thr Val Ser Xaa <210> 496 <211> 351 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (351) <223 > Xaa equals stop translation <400> 496 Met Ala Thr Thr Ala Ala Pro Ala Gly Gly Ala Arg Asn Gly Ala Gly Pro Glu Trp Gly Gly Phe Glu Glu Asn Ile Gln Gly Gly Gly Ser Ala Val Ile Asp Met Glu Asn Met Asp Asp Thr Ser Gly Ser Ser Phe Glu Asp Met Gly Glu Leu His Gln Arg Leu Arg Glu Glu Val Asp Ala Asp Ala Ala Ala Ala Ala Glu Glu Asp Gly Glu Phe Leu Gly Met Lys Gly Phe Lys Gly Gln Leu Ser Arg Gln Val Ala Asp Gln Met Trp Gln Ala Gly Lys Arg Gln Ala Ser Arg Ala Phe Ser Leu Tyr 105 Ala Asn Ile Asp Ile Leu Arg Pro Tyr Phe Asp Val Glu Pro Ala Gln 120 Val Arg Thr Gly Leu Leu Glu Ser Met Ile Pro Ile Lys Met Val Asn

135

140

Phe Pro Gln Lys Ile Ala Gly Glu Leu Tyr Gly Pro Leu Met Leu Val 145 150 155 160

Phe Thr Leu Val Ala Ile Leu Leu His Gly Met Lys Thr Ser Asp Thr 165 170 175

Ile Ile Arg Glu Gly Thr Leu Met Gly Thr Ala Ile Gly Thr Cys Phe
180 185 190

Gly Tyr Trp Leu Gly Val Ser Ser Phe Ile Tyr Phe Leu Ala Tyr Leu 195 200 205

Cys Asn Ala Gln Ile Thr Met Leu Gln Met Leu Ala Leu Leu Gly Tyr 210 215 220

Gly Leu Phe Gly His Cys Ile Val Leu Phe Ile Thr Tyr Asn Ile His 225 230 235 240

Leu His Ala Leu Phe Tyr Leu Phe Trp Leu Leu Val Gly Gly Leu Ser \$245\$ \$250\$

Thr Leu Arg Met Val Ala Val Leu Val Ser Arg Thr Val Gly Pro Thr 260 265 270

Gln Arg Leu Leu Cys Gly Thr Leu Ala Ala Leu His Met Leu Phe 275 280 285

Leu Leu Tyr Leu His Phe Ala Tyr His Lys Val Val Glu Gly Ile Leu 290 295 300

Asp Thr Leu Glu Gly Pro Asn Ile Pro Pro Ile Gln Arg Val Pro Arg 305 310 315 320

Asp Ile Pro Ala Met Leu Pro Ala Ala Arg Leu Pro Thr Thr Val Leu 325 330 335

Asn Ala Thr Ala Lys Ala Val Ala Val Thr Leu Gln Ser His Xaa 340 345 350

<210> 497

<211> 265

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (265)

<223> Xaa equals stop translation

<400> 497

Met Arg Gly Ser Arg Gly Gly Trp Ala Gly Glu Met Ala Ala Ser Gly
1 5 10 15

Glu Ser Gly Thr Ser Gly Gly Gly Ser Thr Glu Glu Ala Phe Met 20 25 30

Thr Phe Tyr Ser Glu Val Lys Gln Ile Glu Lys Arg Asp Ser Val Leu 35 40 45

Thr Ser Lys Asn Gln Ile Glu Arg Leu Thr Arg Pro Gly Ser Ser Tyr 50 60

Phe Asn Leu Asn Pro Phe Glu Val Leu Gln Ile Asp Pro Glu Val Thr 65 70 75 80

Asp Glu Glu Ile Lys Lys Arg Phe Arg Gln Leu Ser Ile Leu Val His 85 90 95

Pro Asp Lys Asn Gln Asp Asp Ala Asp Arg Ala Gln Lys Ala Phe Glu
100 105 110

Ala Val Asp Lys Ala Tyr Lys Leu Leu Leu Asp Gln Glu Gln Lys Lys 115 120 125

Arg Ala Leu Asp Val Ile Gln Ala Gly Lys Glu Tyr Val Glu His Thr 130 135 140

Val Lys Glu Arg Lys Lys Gln Leu Lys Lys Glu Gly Lys Pro Thr Ile 145 150 155 160

Val Glu Glu Asp Asp Pro Glu Leu Phe Lys Gln Ala Val Tyr Lys Gln 165 170 175

Thr Met Lys Leu Phe Ala Glu Leu Glu Ile Lys Arg Lys Glu Arg Glu
180 185 190

Ala Lys Glu Met His Glu Arg Lys Arg Gln Arg Glu Glu Glu Ile Glu 195 200 205

Ala Gln Glu Lys Ala Lys Arg Glu Arg Glu Trp Gln Lys Asn Phe Glu 210 215 220

Glu Ser Arg Asp Gly Arg Val Asp Ser Trp Arg Asn Phe Gln Ala Asn 225 230 235 240

Thr Lys Gly Lys Lys Glu Lys Lys Asn Arg Thr Phe Leu Arg Pro Pro 245 250 250

Lys Val Lys Met Glu Gln Arg Glu Xaa 260 265

<210> 498

<211> 25

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 498

Asp Ser Met Pro Thr Cys Pro Leu Xaa Ala Ser Leu Glu Cys Gly Pro

<222> (238)

```
10
                                                         15
                5
1
Leu Leu Pro Val Arg Leu Cys Cys Leu
            20
<210> 499
<211> 159
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (159)
<223> Xaa equals stop translation
<400> 499
Met Asn Glu Tyr Arg Val Pro Glu Leu Asn Val Gln Asn Gly Val Leu
                                     10
Lys Ser Leu Ser Phe Leu Phe Glu Tyr Ile Gly Glu Met Gly Lys Asp
                                 25
                                                     30
Tyr Ile Tyr Ala Val Thr Pro Leu Leu Glu Asp Ala Leu Met Asp Arg
Asp Leu Val His Arg Gln Thr Ala Ser Ala Val Val Gln His Met Ser
Leu Gly Val Tyr Gly Phe Gly Cys Glu Asp Ser Leu Asn His Leu Leu
Asn Tyr Val Trp Pro Asn Val Phe Glu Thr Ser Pro His Val Ile Gln
Ala Val Met Gly Ala Leu Glu Gly Leu Arg Val Ala Ile Gly Pro Cys
Arg Met Leu Gln Tyr Cys Leu Gln Gly Leu Phe His Pro Ala Arg Lys
Val Arg Asp Val Tyr Trp Lys Ile Tyr Asn Ser Ile Tyr Ile Gly Ser
Gln Asp Ala Leu Ile Ala His Tyr Pro Arg Ile Tyr Gln Arg Xaa
                    150
<210> 500
<211> 279
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
```

<221> SITE

<222> (279)

<223> Xaa equals stop translation

<400> 500

Met Ile Ser Asp Asn Ser Ala Glu Asn Ile Ala Leu Val Thr Ser Met

1 5 10 15

Tyr Asp Gly Leu Leu Gln Ala Gly Ala Arg Leu Cys Pro Thr Val Gln
20 25 30

Leu Glu Asp Ile Arg Asn Leu Gln Asp Leu Thr Pro Leu Lys Leu Ala
35 40 45

Ala Lys Glu Gly Lys Ile Glu Ile Phe Arg His Ile Leu Gln Arg Glu 50 55 60

Phe Ser Gly Leu Ser His Leu Ser Arg Lys Phe Thr Glu Trp Cys Tyr 65 70 75 80

Gly Pro Val Arg Val Ser Leu Tyr Asp Leu Ala Ser Val Asp Ser Cys
85
90
95

Glu Glu Asn Ser Val Leu Glu Ile Ile Ala Phe His Cys Lys Ser Pro 100 105 110

His Arg His Arg Met Val Val Leu Glu Pro Leu Asn Lys Leu Leu Gln
115 120 125

Ala Lys Trp Asp Leu Leu Ile Pro Lys Phe Phe Leu Asn Phe Leu Cys 130 135 140

Asn Leu Ile Tyr Met Phe Ile Phe Thr Ala Val Ala Tyr His Gln Pro 145 150 155 160

Thr Leu Lys Lys Gln Ala Ala Pro His Leu Lys Ala Glu Val Gly Asn 165 170 175

Ser Met Leu Leu Thr Gly His Ile Leu Ile Leu Leu Gly Gly Ile Tyr 180 185 190

Leu Leu Val Gly Gln Leu Trp Tyr Phe Trp Arg Arg His Val Phe Ile 195 200 205

Trp Ile Ser Phe Ile Asp Ser Tyr Phe Glu Ile Leu Phe Leu Phe Gln
.210 215 220

Ala Leu Leu Thr Val Val Ser Gln Val Leu Cys Phe Leu Xaa Ile Glu 225 230 235 240

Trp Tyr Leu Pro Leu Leu Val Ser Ala Leu Val Leu Gly Trp Leu Asn 245 250 255

Leu Leu Tyr Tyr Thr Arg Gly Phe Gln His Thr Gly Ile Tyr Ser Val 260 265 270

Met Ile Gln Lys Pro Trp Xaa

```
<210> 501
<211> 193
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 501
Met Ile Arg Cys Gly Leu Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro
Leu Leu Leu Ser Ala Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly
Arg Gly Trp Leu Gln Ser Ser Asp His Gly Gln Thr Ser Ser Leu Trp
Trp Lys Cys Ser Gln Glu Gly Gly Gly Ser Gly Ser Tyr Glu Glu Gly
Cys Gln Ser Leu Met Glu Tyr Ala Trp Gly Arg Ala Ala Ala Met
Leu Phe Cys Gly Phe Ile Ile Leu Val Ile Cys Phe Ile Leu Ser Phe
Phe Ala Leu Cys Gly Pro Gln Met Leu Val Phe Leu Arg Val Ile Gly
Gly Leu Leu Ala Leu Ala Ala Val Phe Gln Ile Ile Ser Leu Val Ile
Tyr Pro Val Lys Tyr Thr Gln Thr Phe Thr Leu His Ala Asn Xaa Ala
Val Thr Tyr Ile Tyr Asn Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr
Ile Ile Leu Ile Gly Cys Ala Phe Phe Phe Cys Cys Leu Pro Asn Tyr
                                    170
Glu Asp Asp Leu Leu Gly Asn Ala Lys Pro Arg Tyr Phe Tyr Thr Ser
```

Ala

<210> 502

<211> 205

<212> PRT

<213> Homo sapiens

180

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<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (205)
<223> Xaa equals stop translation
<400> 502
Met Ala Ala Gly Asp Gln Val Phe Ser Gly Ala Gly His Val Xaa Glu
                                      10
His Val Ala Gly Gly Arg His Ala Trp Leu Leu Thr Trp Gln Ser Ala
Cys Pro Ala Asn Arg Leu Ser Leu Val Pro Leu Val Pro Ser Ala Ser
                              40
Met Thr Arg Leu Met Arg Xaa Arg Thr Ala Ser Gly Ser Ser Val Ile
Leu Trp Met Ala Pro Ala Ala Pro Thr Pro Ala Arg Ala Pro Glu
Ala Ala Pro Thr Pro Ala Arg Ala Pro Ala Ala Ala Arg Thr Pro Ala
Arg Gly Pro Thr Trp Thr Ser Pro Pro Thr Arg Val Leu Leu Gly Thr
Xaa Pro Gly Pro Ser Pro Trp Arg Ser Pro Ala Arg Arg Pro Ala Gln
Leu Pro Pro Pro Asp Ser Asp Leu Cys Ser Gly Pro Leu Leu Pro Gly
Pro Phe Ser Pro Pro Ala Cys His Thr Ala Pro Asn Ser Val Leu Ile
Gln Ser Leu Phe Cys Lys Ser Glu Leu Trp Trp Arg Gln Met Arg Ser
                                     170
Ile Thr Trp Val Pro Ser Pro Lys Ala Gly Trp Arg Trp Thr Lys Gly
             180
                                 185
```

```
Arg Lys Gln Ala Ser Pro His Arg Ile Leu Phe His Xaa
                             200
        195
<210> 503
<211> 147
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (147)
<223> Xaa equals stop translation
<400> 503
Met Ala Leu Thr Leu Leu Pro Ser Val Ser Arg Leu Pro Gly Glu Arg
Met Ala Ala Ser Gly Leu Pro Tyr Val Leu His His Lys Ser Ser Leu
              2.0
Met Lys Val Ile Phe Phe Pro Tyr Pro Val Leu Pro Leu Pro Ala Pro
Asn Gly Thr Trp Val Pro Arg Leu Val Leu Gly Leu Gly Ser Gly Asp
     50
                          55
Gln Val His Tyr Leu Pro Ile Ser Ser Ser Ile Val Asn Tyr Gly Thr
Ser Val Ser Gly Lys Ser Trp Val Phe Leu Val Tyr Pro Leu His Pro
                                      90
Thr Pro Thr Trp Ser Thr Arg Cys Phe Gln Val Trp Asp Leu Leu Ser
 Val Glu Leu Pro Asp Lys Gly Glu Gly Asn Thr Arg Arg Ala Ser Gly
 Val Pro Gly Leu Ser Gln Leu Pro Thr Ser His Lys Pro Ile Lys Gln
    130
 Glu Tyr Xaa
 145
 <210> 504
 <211> 64
 <212> PRT
 <213> Homo sapiens
<220>
 <221> SITE
 <222> (64)
 <223> Xaa equals stop translation
 <400> 504
Met Val Trp Val Leu Trp Ser Ala Pro Ser Leu Ala Pro Pro Trp Val
```

15 10 5 1 Gly Pro Cys Trp Pro Ser Thr Gly Asn Cys Cys Leu Cys Glu Val Gly Ala Ala Leu Pro Pro Arg Gly Pro Ser Leu Ser Asp Cys Leu Gly Leu Pro Pro Trp Thr Pro Trp Gly Pro Ala Trp Thr Leu Ala Gln Ser Xaa 50 <210> 505 <211> 94 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (94) <223> Xaa equals stop translation <400> 505 Met Ser Thr Gly Ala Leu Asn Thr Ser Pro Pro Ala Ser Asn Arg Leu Glu Ser Thr Leu Asn Glu Tyr Leu Ile Gln Pro Gln Leu His Cys Ser Ser Val Gln Arg Leu Thr Leu Lys Trp Gly Cys Ser Ser Leu Gln Arg Asp Gly Gln Ala Val Pro Trp Gly Leu Trp Gln Arg Ala Tyr Pro Ser Leu Leu Pro Thr Leu Pro Ser Asp Leu Leu Arg Pro His Ala Val Thr Pro Ser Val Ser Val His Thr Cys Glu Ser Ser Xaa 8.5 <210> 506 <211> 22 <212> PRT <213> Homo sapiens <400> 506 Met Phe Leu Ile Phe Val Tyr Phe Leu Lys Ile Leu Phe Ser Ser 10

Leu Pro Phe Leu Trp Leu 20

```
<210> 507
<211> 22
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Phe Leu Ile Phe Val Tyr Phe Leu Lys Xaa Leu Phe Ser Ser Ser
                                      10
Leu Pro Phe Leu Trp Leu
             20
<210> 508
<211> 33
<212> PRT
<213> Homo sapiens
<400> 508
Arg Gly Gly Leu Cys Pro Leu Leu Val Pro Gly Pro Leu Ala Arg Gln
Glu Pro Ser Pro Ser Leu Gln Gly Cys Ser Glu Ser Pro Val Gly Met
             20
Asp
<210> 509
<211> 28
<212> PRT
<213> Homo sapiens
<400> 509
Met Gln Phe Leu Leu Thr Ala Phe Leu Leu Val Pro Leu Leu Ala Leu
                                    10
Cys Asp Val Pro Ile Ser Leu Gly Phe Ser Pro Ser
             20
<210> 510
<211> 15
<212> PRT
<213> Homo sapiens
<400> 510
Pro Gly Lys Pro Gln Ala Cys Pro Glu Leu Thr Ser Val Leu Pro
                 5
                                     10
<210> 511
```

```
<211> 27
<212> PRT
<213> Homo sapiens
<400> 511
Met Thr Phe Thr Leu Gly Asp Ser Gln Val Leu Leu Ile Asn Leu Phe
                                     10
Pro Ser Met Pro Ser Gly Ser Cys Ala Arg Pro
             20
<210> 512
<211> 19
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 512
Asn Lys Ser Leu Xaa Ser Cys Leu Phe Val Leu His Phe Val Leu His
1
Cys Xaa Phe
<210> 513
<211> 29
<212> PRT
<213> Homo sapiens
<400> 513
Met Glu Lys Thr His Arg Leu Arg Ile Arg Asn Pro Cys Leu Gln Phe
Ser Ile Leu Asn Leu Phe Leu Leu Lys Met Ile Val Ser
<210> 514
<211> 75
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (75)
<223> Xaa equals stop translation
```

```
<400> 514
Met Val Asp Ile Ser Lys Met His Met Ile Leu Tyr Asp Leu Gln Gln
Asn Leu Ser Ser His Arg Ala Leu Glu Lys Gln Ile Asp Thr Leu
Ala Gly Lys Leu Asp Ala Leu Thr Glu Leu Leu Ser Thr Ala Leu Gly
Pro Ser Ser Phe Gln Asn Pro Ala Ser Ser Pro Ser Ser Trp Thr His
Glu Glu Glu Pro Gly Tyr Phe Pro Gln Tyr Xaa
<210> 515
<211> 10
<212> PRT
<213> Homo sapiens
<400> 515
Leu Pro Leu Ala Glu Leu Lys Asn Trp Val
<210> 516
<211> 207
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (207)
<223> Xaa equals stop translation
<400> 516
Met Leu Trp Phe Gly Gly Cys Ser Ala Val Asn Ala Thr Gly His Leu
Ser Asp Thr Leu Trp Leu Ile Pro Ile Thr Phe Leu Thr Ile Gly Tyr
Gly Asp Val Val Pro Gly Thr Met Trp Gly Lys Ile Val Cys Leu Cys
Thr Gly Val Met Gly Val Cys Cys Thr Ala Leu Leu Val Ala Val Val
Ala Arg Lys Leu Glu Phe Asn Lys Ala Glu Lys His Val His Asn Phe
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Met Met Asp Ile Gln Tyr Thr Lys Glu Met Lys Glu Ser Ala Ala Arg 85 90 95

Val Leu Gln Glu Ala Trp Met Phe Tyr Lys His Thr Arg Arg Lys Glu 100 \$105\$

Ser His Ala Ala Arg Arg His Gln Arg Xaa Leu Leu Ala Ala Ile Asn 115 120 125

Ala Phe Arg Gln Val Arg Leu Lys His Arg Lys Leu Arg Glu Gln Val

Gln Gln Asn Leu Ser Ser His Arg Ala Leu Glu Lys Gln Ile Asp 165 170 175

Thr Leu Ala Gly Lys Leu Asp Ala Leu Thr Glu Leu Leu Ser Thr Ala 180 185 190

Leu Gly Pro Arg Gln Leu Pro Glu Pro Ser Gln Gln Ser Lys Xaa 195 200 205

<210> 517

<211> 36

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 517

Met Trp Arg Cys Arg Gly Lys Leu Ser Phe Pro Leu Phe Ala Val Val 1 5 10 15

Ile Val Ser Cys Arg Lys Asp Gly Pro Asp Ala Ala Ala Pro Ala 20 25 30

Val Xaa Lys Lys 35

<210> 518

<211> 19

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 518

Met Ala Leu Val Ala Leu Phe Thr Gln Leu Met Arg Xaa Leu Gly Arg

15 10 1 Cys Pro Gln <210> 519 <211> 32 <212> PRT <213> Homo sapiens <400> 519 Met Thr Phe Pro Phe Glu Lys Glu Asn Ser Cys Phe Gln Cys Leu Leu Phe Asp Ser Trp Arg Glu Gln Thr Arg Thr Asn Ile Gln Pro Gln Arg 25 20 <210> 520 <211> 28 <212> PRT <213> Homo sapiens <400> 520 Met His Leu Leu Asp Phe Phe Arg Asp Leu Val Leu Leu Val Leu Leu Ala Leu Leu Asp Ser Phe Trp Leu Glu Val Gln Lys 20 <210> 521 <211> 26 <212> PRT <213> Homo sapiens <400> 521 Met Cys Leu Ile His Phe Ile Lys Ile Ile Leu Val Phe Ile Leu Lys Leu Trp Leu Tyr Ser Gln Lys Cys Pro Lys 20 <210> 522 <211> 33 <212> PRT <213> Homo sapiens <400> 522 Met Ile His Val His Glu Trp Asn Asp Gln Met Leu Met Val Tyr Ile 10

Phe Leu Tyr Pro Val Ser Ile Thr Phe Leu Asn Leu Cys Ser Leu Thr

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<210> 523
<211> 47
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (17)
<223> Kaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 523
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Leu Asn Glu Ser Tyr Val Ser Arg Ala Gly Gly Trp Phe Ser Met Phe

Xaa Leu Ile Phe Phe Leu Leu Ala Leu Gly Ser Xaa Leu Cys Leu Leu

Leu Cys Leu Pro Ser Phe Asn Lys Thr Arg Arg Lys Gln Lys Pro

<210> 524 <211> 43 <212> PRT <213> Homo sapiens

<400> 524 Ser Ser Lys Thr Pro Leu Pro Ser Glu Arg Arg Trp Ile Ser Gly Ser

Ser Leu Met Ala Pro Arg Pro Trp Leu Leu Gly Ile Ala Leu Leu Gly

Leu Trp Ala Leu Glu Pro Ala Leu Gly His Trp

<210> 525 <211> 3 <212> PRT <213> Homo sapiens <400> 525 Leu Asn Trp

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<210> 526
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<211> 174

<212> PRT

<213> Homo sapiens

<400> 526

Phe Ala Phe Cys Ala Glu Leu Met Ile Gln Asn Trp Thr Leu Gly Ala 1 10 15

Val Asp Ser Gln Met Asp Asp Met Asp Met Asp Leu Asp Lys Glu Phe 20 25 30

Leu Gln Asp Leu Lys Glu Leu Lys Val Leu Val Ala Asp Lys Asp Leu 40 45

Leu Asp Leu His Lys Ser Leu Val Cys Thr Ala Leu Arg Gly Lys Leu 50 55 60

Gly Val Phe Ser Glu Met Glu Ala Asn Phe Lys Asn Leu Ser Arg Gly 65 70 75 80

Leu Val Asn Val Ala Ala Lys Leu Thr His Asn Lys Asp Val Arg Asp 85 90 95

Leu Phe Val Asp Leu Val Glu Lys Phe Val Glu Pro Cys Arg Ser Asp

His Trp Pro Leu Ser Asp Val Arg Phe Phe Leu Asn Gln Tyr Ser Ala 115 120 125

Ser Val His Ser Leu Asp Gly Phe Arg His Gln Ala Ser Gly Thr Ala 130 135 140

Val Pro Pro Asn Ala Pro Pro Thr Leu Thr Ile Lys Leu Leu 165 170 .

<210> 527

<211> 43

<212> PRT

<213 > Homo sapiens

<400> 527

Met Trp Lys Asn Leu Gly Ser Gly Ser Val Phe Val Thr Trp Phe Ser 1 5 10 15

Leu Val Met Ile Leu Ser Gly Ile Gly Pro Leu Gly Asp Ala Glu Asp
20 25 30

Ser Ile Ser Asp Val Ser His Arg Leu Arg Pro 35 40

<210> 528

<211> 13

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<212> PRT
<213> Homo sapiens
<400> 528
Phe Gln Phe Pro Leu Leu Thr Ile Ala Leu Gln Phe Leu
<210> 529
<211> 30
<212> PRT
<213> Homo sapiens
<400> 529
Met His Tyr Val Ile Val Leu Ser Leu Phe Val Val Leu Glu Lys Lys
                 5
                                      10
Asn Lys Met Gly Ser Asp Gly Cys Leu Arg Lys Asn Gly Ser
              20
                                  25
<210> 530
<211> 3
<212> PRT
<213> Homo sapiens
<400> 530
Met Lys Thr
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<210> 531
<211> 47
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 531
Met Ser Arg Ser Ile Val Leu Arg Gly Ser Leu Phe Leu Phe Phe Ser
His Tyr Thr Leu Lys Leu Leu Ser Val Ile Lys Gln Thr Asn Arg Lys
Ile Val Trp Glu Lys Pro Cys Ile Arg Leu Phe Tyr Xaa Val Leu
<210> 532
<211> 26
<212> PRT
<213> Homo sapiens
<400> 532
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<211> 57 <212> PRT

Met Pro Leu Pro Val Leu Leu Cys Leu Thr Leu Pro Met Pro Leu Pro 10 Ser Ala Thr Ala Arg Gly Gly Asn Arg Thr 20 <210> 533 <211> 58 <212> PRT <213> Homo sapiens <400> 533 Ser Ser Ile Pro Val Ser Ile Leu Ile Gly Met Lys Leu Ile Leu Tyr Leu Leu Ile Thr Glu Ser Gly Ser His Glu Lys Lys Ser Phe Tyr Pro 25 Ser Phe Lys Tyr Met Phe Lys Ile Ile Ile Tyr Val Ser Ala Tyr Cys Arg Thr Ala Leu Arg Ala Thr Val Ser His <210> 534 <211> 19 <212> PRT <213> Homo sapiens <400> 534 Asn Arg Thr Leu Leu Phe Leu Ile Leu Phe Val Leu Phe Gly Leu Gly Tyr Gly Phe <210> 535 <211> 40 <212> PRT <213> Homo sapiens Met Phe Leu Leu Val Leu Ser Val Phe Cys Asp Phe Met Cys Ser Ile Ala Pro Arg Cys His Ala Leu Ser Leu Val Ser Leu Arg Ala Gln His Leu Ser Leu Phe Ile Thr Cys His 35 <210> 536